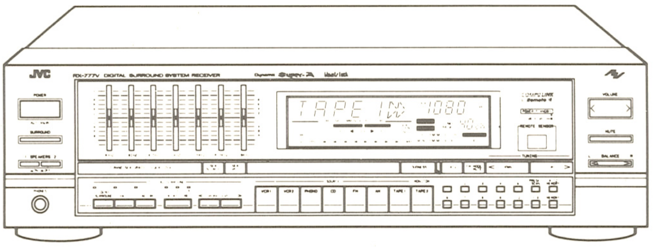
RX-777VBK
RX-777VSBK
RX-777VLBK

JVC

SERVICE MANUAL

COMPUTER CONTROLLED RECEIVER

MODEL No. **RX-777VBK**
RX-777VSBK
RX-777VLBK



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No. 20055
May. 1988

Safety Precautions

1. The design of this product contains special hardware and many circuits and components specially for safety purposes. For continued protection, no changes should be made to the original design unless authorized in writing by the manufacturer. Replacement parts must be identical to those used in the original circuits. Service should be performed by qualified personnel only.
2. Alterations of the design or circuitry of the product should not be made. Any design alterations of the product should not be made. Any design alterations or additions will void the manufacturer's warranty and will further relieve the manufacturer of responsibility for personal injury or property damage resulting therefrom.
3. Many electrical and mechanical parts in the product have special safety-related characteristics. These characteristics are often not evident from visual inspection nor can the protection afforded by them necessarily be obtained by using replacement components rated for higher voltage, wattage, etc. Replacement parts which have these special safety characteristics are identified in the Parts List of Service Manual. Electrical components having such features are identified by shading on the schematics and by (⚠) on the Parts List in the Service Manual. The use of a substitute replacement which does not have the same safety characteristics as the recommended replacement part shown in the Parts List of Service Manual may create shock, fire, or other hazards.
4. The leads in the products are routed and dressed with ties, clamps, tubings, barriers and the like to be separated from live parts, high temperature parts, moving parts and/or sharp edges for the prevention of electric shock and fire hazard. When service is required, the original lead routing and dress should be observed, and it should be confirmed that they have been returned to normal, after re-assembling.
5. Leakage current check (Electrical shock hazard testing)

   After re-assembling the product, always perform an isolation check on the exposed metal parts of the product (antenna terminals, knobs, metal cabinet, screw heads, headphone jack, control shafts, etc.) to be sure the product is safe to operate without danger of electrical shock.

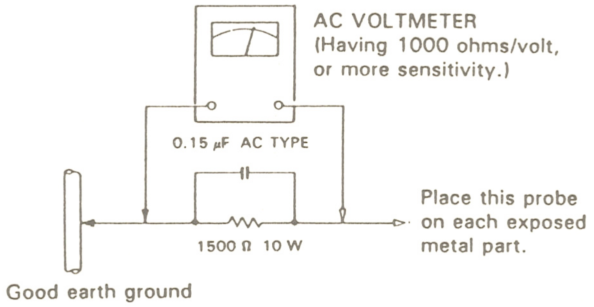
   Do not use a line isolation transformer during this check.

   - Plug the AC line cord directly into the AC outlet. Using a "Leakage Current Tester", measure the leakage current from each exposed metal part of the cabinet, particularly any exposed metal part having a return path to the chassis, to a known good earth ground. Any leakage current must not exceed 0.5 mA AC (r.m.s.).
   - Alternate check method

     Plug the AC line cord directly into the AC outlet. Use an AC voltmeter having 1,000 ohms per volt or more sensitivity in the following manner. Connect a 1,500 Ω 10 W resistor paralleled by a 0.15 µF AC-type capacitor between an exposed metal part and a known good earth ground.

     Measure the AC voltage across the resistor with the AC voltmeter.

     Move the resistor connection to each exposed metal part, particularly any exposed metal part having a return path to the chassis, and measure the AC voltage across the resistor. Now, reverse the plug in the AC outlet and repeat each measurement. Any voltage measured must not exceed 0.75 V AC (r.m.s.). This corresponds to 0.5 mA AC (r.m.s.).


AC VOLTMETER
(Having 1000 ohms/volt, or more sensitivity.)
0.15 µF AC TYPE
1500 Ω 10 W
Place this probe on each exposed metal part.
Good earth ground

Warning

1. This equipment has been designed and manufactured to meet international safety standards.
2. It is the legal responsibility of the repairer to ensure that these safety standards are maintained.
3. Repairs must be made in accordance with the relevant safety standards.
4. It is essential that safety critical components are replaced by approved parts.
5. If mains voltage selector is provided, check setting for local voltage.

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Instruction Book

SPECIFICATIONS

AMPLIFIER SECTION

Output power:
(CD IN → SP. OUT)
2-channel operation : **80 watts per channel, min, RMS, both channels driven into 8 ohms from 20 Hz to 20 kHz, with no more than 0.007 % total harmonic distortion**
80 watts per channel, min, RMS, both channels driven into 8 ohms at 1 kHz, with no more than 0.003 %** total harmonic distortion
4-channel operation
Front channel : **75 watts per channel, min, RMS, both channels driven into 8 ohms from 20 Hz to 20 kHz, with no more than 0.007 % total harmonic distortion**
Rear channel : 7 watts per channel, min, RMS, both channels driven into 8 ohms at 1 kHz, with no more than 0.7 % total harmonic distortion
Total harmonic distortion : 0.003 %** at 80 watts (1 kHz, 8 ohms)
Intermodulation distortion : 0.007 % at 80 watts
Input sensitivity/impedance
PHONO : 2.5 mV/47 kohms
TAPE 1 PLAY, TAPE 2 PLAY, CD, VCR 1 PLAY, VCR 2 PLAY : 220 mV/45 kohms
Recording output level : 220 mV
Frequency response
PHONO (RIAA equalization) : 20 Hz – 20 kHz ±0.5 dB
CD, TAPE 1, TAPE2, VCR 1, VCR 2 : 5 Hz – 50 kHz +0 dB/-1 dB
S.E.A. graphic equalizer
Center frequencies : 63 Hz, 160 Hz. 400 Hz, 1 kHz, 2.5 kHz, 6.3 kHz, 16 kHz
Control range : ±10 dB
Signal-to-noise ratio
PHONO : 71 dB ('66 IHF), 78 dB ('78 IHF)
CD, TAPE 1, TAPE2, VCR 1, VCR 2 : 100 dB ('66 IHF), 85 dB ('78 IHF)

FM TUNER SECTION (IHF)

Tuning range : 87.5 MHz – 108.0 MHz
Usable sensitivity : Mono 10.8 dBf, 0.9 μV/75 ohms
50 dB quieting sensitivity : Mono 16.3 dBf, 1.8 μV/75 ohms
Stereo 38.3 dBf, 22.5 μV/75 ohms
Signal-to-noise ratio : Mono 82 dB
Stereo 73 dB (A-net)
Total harmonic distortion 1 kHz : Mono 0.15 %
Stereo 0.2 %
Frequency response : 30 Hz – 15 kHz +0.5 dB/–3 dB
Capture ratio : 1.5 dB
Alternate channel selectivity : 70 dB ±400 kHz
Image response ratio : 56 dB at 98 MHz
IF response ratio : 85 dB at 98 MHz
Stereo separation : 40 dB at 1 kHz

AM TUNER SECTION (IHF)

Tuning range : 530 kHz – 1,710 kHz
Sensitivity : 30 μV* (external), 300 μV/m* (loop antenna)
Signal-to-noise ratio : 50 dB* (100 mV/m)
Selectivity : 38 dB ±10 kHz
Image response ratio : 40 dB*
IF response ratio : 65 dB
Total harmonic distortion : 0.5 % (100 mV/m)

VIDEO SECTION

Output signal level (VCR 1 REC, VCR 2 REC, MONITOR OUT) : 1 Vp-p (at 1 Vp-p input)
Impedance : 75 ohms, unbalanced
Synchronization : Negative
Signal-to-noise ratio : 45 dB
Crosstalk : 45 dB (3.58 MHz)

GENERAL

Power requirements : AC 120 V∿, 60 Hz
Power consumption : 325 watts, 425 VA
Dimensions (W x H x D) : 17-3/16" x 5" x 15-1/8" (435 x 126 x 383 mm)
Weight : 19.9 lbs (9.0 kg)

* Measured at 1,000 kHz for IHF.
** Measured by JVC Audio Analysis System.

Design and specifications subject to change without notice.

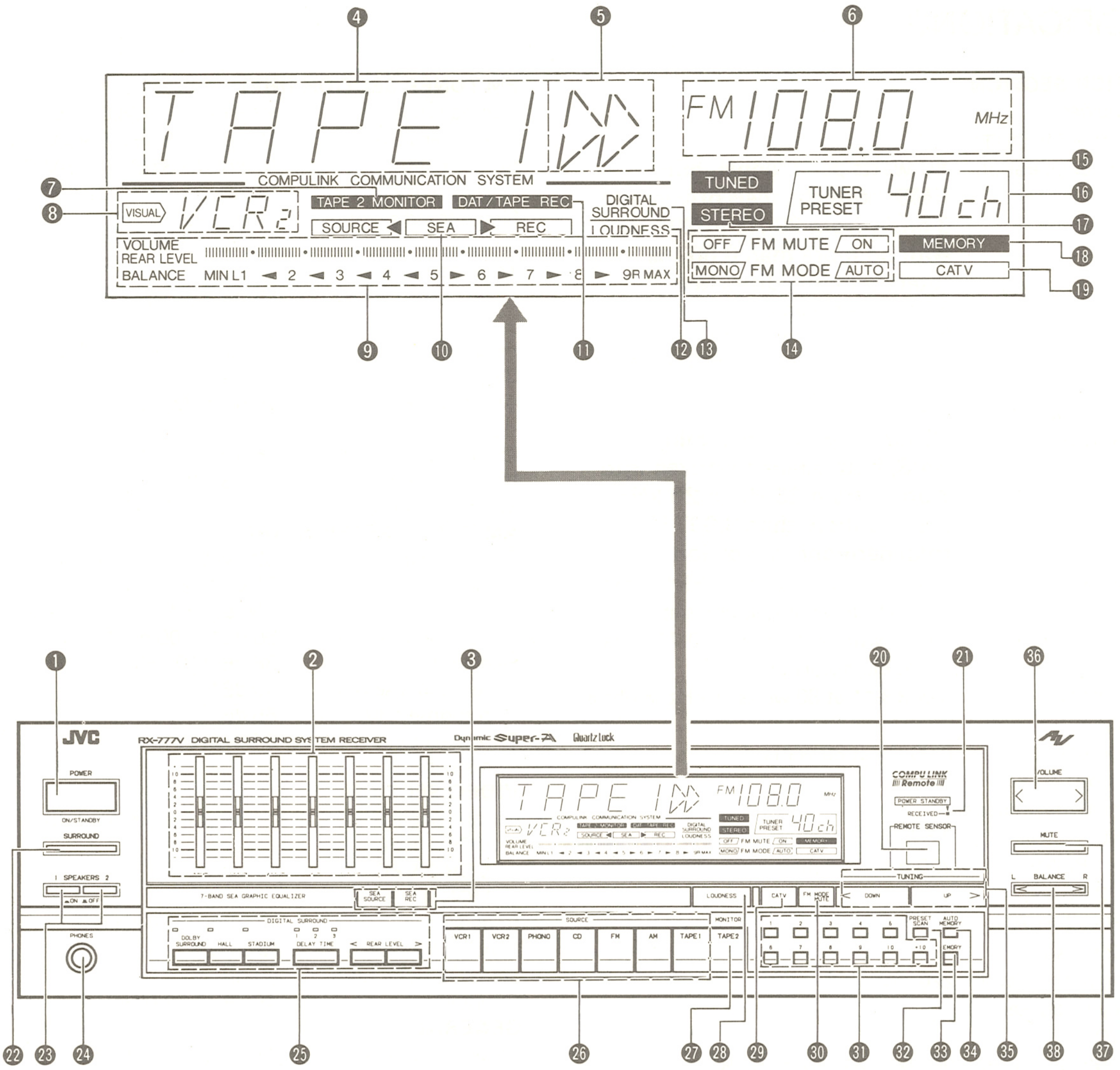
❹
❺
❻
TAPE 1
FM 108.0 MHz
COMPULINK COMMUNICATION SYSTEM
TUNED
❶❺
❼
❽
VISUAL VCR2
TAPE 2 MONITOR
DAT/TAPE REC
DIGITAL SURROUND
STEREO
TUNER PRESET 40ch
❶❻
SOURCE ◄ SEA ► REC
LOUDNESS
❶❼
VOLUME
REAR LEVEL
BALANCE MIN L1 ◄ 2 ◄ 3 ◄ 4 ◄ 5 ► 6 ► 7 ► 8 ► 9R MAX
OFF FM MUTE ON
MONO FM MODE AUTO
MEMORY
❶❽
CATV
❶❾
❾
❿
⓫
⓬
⓭
⓮
❶
❷
❸
⓴
㉑
㊱
JVC
RX-777V DIGITAL SURROUND SYSTEM RECEIVER
Dynamic Super-A
Quartz Lock
POWER
ON/STANDBY
SURROUND
1 SPEAKERS 2
ON OFF
PHONES
7-BAND SEA GRAPHIC EQUALIZER
SEA SOURCE
SEA REC
COMPU LINK Remote
POWER STANDBY
RECEIVED
REMOTE SENSOR
VOLUME
MUTE
L BALANCE R
TUNING
LOUDNESS
CATV
FM MODE MUTE
DOWN
UP
DIGITAL SURROUND
DOLBY SURROUND
HALL
STADIUM
DELAY TIME
REAR LEVEL
SOURCE
VCR1
VCR2
PHONO
CD
FM
AM
TAPE1
MONITOR
TAPE2
PRESET SCAN
AUTO MEMORY
MEMORY
+10
㉒
㉓
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Fig. 13

FRONT PANEL

① **POWER**

ON: Press to turn the power on. To turn the power off, press again. Even when the power is turned off, the POWER STANDBY indicator remains lit unless the receiver is unplugged from the wall outlet.

STANDBY: Even when indicators other than POWER STANDBY are not lit, the memory circuit operates and preset and source select data, etc. are not lost and cannot be altered by accident as long as the power cord is plugged into an AC outlet. This is called the POWER STANDBY mode. The preset data and the source select data are maintained even in the case of a power failure or when the power is not applied does not exceed a couple of days.

Notes:

- **Even in the POWER STANDBY mode, this receiver consumes a small amount of electricity (2 watts). To shut off the power completely, disconnect the power cord.**
- **POWER STANDBY indicator:**
  Connecting the power plug to the AC wall outlet causes this indicator to light, indicating that the unit has been set to the POWER STANDBY mode.
- **When the power is tuned on, the operation buttons may not work correctly and abnormal indications may appear. If this happens, unplug the power cord from the AC outlet and insert it again.**

② **7-BAND SEA GRAPHIC EQUALIZER**

The built-in graphic equalizer divides the audio spectrum into seven frequency bands with center frequencies from 63 Hz to 16 kHz at intervals of 4/3 octave.

When the S.E.A. level is set to "0" (center position), the frequency response is flat. The response can be varied by ±10 dB by raising or lowering the knob.

63 Hz: Raise to emphasize the very low bass response of organs, drums, and contrabass. It produces stable and solid sound with emphasis and eliminates the unclear response at low frequencies when de-emphasized.

160 Hz: Emphasize to obtain a more expanded low frequency sound. De-emphasize to eliminate unclear sound caused by large or nearly empty listening rooms.

400 Hz: This frequency range is the base on which music is constructed. Emphasize to really put a punch in your music.

1 kHz: Most effective in emphasizing or de-emphasizing the human voice. Emphasize to cause the vocalist to be brought to the foreground, or de-emphasize to cause it to recede into the background.

2.5 kHz: The human ear is most sensitive to this frequency. If the music sounds hard or metallic, de-emphasize it.

6.3 kHz: Boost to add clarity to winds and strings. This frequency band varies the tonal expression, and has most influence on the subtleties of the music.

16 kHz: Boosting this frequency range properly adds to the delicacy of highs, with cymbals and triangles resounding in a more ear-pleasing manner, and provides a feeling of extension. This frequency band can also be used to compensate for cartridge response since most moving-magnet cartridges have their resonance peaks in the frequency range from 10 kHz to 20 kHz.

③ **SEA**

SEA SOURCE: Press this button to listen to S.E.A.-compensated sound.

SEA REC: Press this button to record S.E.A.-compensated signals.

Note:

- **S.E.A.-compensated sound is not available to the TAPE 2 REC, SURROUND SPEAKERS and REAR PRE OUT terminals.**

④ **SOURCE OPERATION indicator**

This shows the audio signal selected with the source selectors, to be output from the speakers or recorded. When the MUTE button is pressed to cut the sound, "MUTE" is displayed. Pressing the button again will release the MUTE function and the source indication will be restored. When the MUTE button on the remote control unit is pressed, the display shows "MUTE"; when it is pressed again, "OFF" will be displayed. When the TAPE 2 button of the remote control unit is pressed, "ON" or "OFF" is shown: when the 10-KEY keypad is used "1" – "10", "+10" and "0" are shown in the display.

⑤ **Operation symbol indicator**

When any of the ▶, ■, ⏮, ⏭, ⏸, ⏪ and ⏩ buttons of the remote control unit is pressed, the corresponding indicator lights. (See page 24.)

⑥ **FM/AM indicator**

The "FM" indicator lights during FM broadcast reception, and "AM" lights during AM broadcast reception, while the frequency being received is also displayed.

⑦ **TAPE 2 MONITOR indicator**

When the TAPE 2 button has been pressed, this indicator lights.

⑧ **VISUAL indicator**

This shows when a video signal has been selected with the VIDEO source selectors, for playback or recording.

⑨ **VOLUME/REAR LEVEL/BALANCE indicator**

Normally the "VOLUME" indicator lights and the volume of the speaker or headphone sound corresponding to that set with the VOLUME buttons is displayed by the bar graph indicators.

When the REAR LEVEL buttons is pressed, the "REAR LEVEL" indicator lights, and the REAR PRE OUT level and rear speaker volume will be indicated as a proportion of the front speaker volume.

When the BALANCE button is pressed, the "BALANCE" indicator lights and the balance between the left and right channels will be indicated by the arrows.

The "REAR LEVEL" and "BALANCE" indications will last for about 5 seconds, and then the "VOLUME" display resumes.

Note:

- **Even when the REAR LEVEL is set to minimum, there will be low level output sound, and the leftmost bar of the VOLUME indicator will be lit.**

⑩ **SEA indicator**

When the SEA SOURCE button is pressed, "SOURCE" lights to show that the S.E.A. is processing the signals fed to the speakers or headphones.

When the SEA REC button is pressed, "REC" lights to show that the S.E.A. is processing the signals output from the REC OUT terminals.

⑪ **DAT/TAPE REC indicator**

This indicator lights for about 5 seconds when the DAT (Digital Audio Tape) deck or cassette deck enters the record mode under the control of the remote control unit.

⑫ **LOUDNESS indicator**

When the LOUDNESS button has been pressed, this indicator lights.

⑬ **DIGITAL SURROUND indicator**

This indicator lights when the SURROUND button is pressed to activate the surround mode.

⑭ **FM MUTE/FM MODE indicator**

These indicators show "AUTO/ON" or "MONO/OFF" according to the setting of the FM MODE/MUTE button.

⑮ **TUNED indicator**

When tuned to the center frequency of a broadcast, this indicator lights.

⑯ **TUNER PRESET indicator**

This shows the preset channel selected by the 10-KEY buttons, for a total of 40 FM and AM stations. It also shows the station number while programming or monitoring programmed broadcasts.

⑰ **STEREO indicator**

When an FM stereo broadcast is being received, this indicator lights. When the MODE indicator shows "MONO", it will not light even if a stereo FM broadcast is received. If you wish to receive the broadest in stereo, press the FM MODE/MUTE button so that "AUTO" is shown.

⑱ **MEMORY indicator**

This indicator lights for about five seconds when the MEMORY button is pressed to on, and for one second when a frequency is stored in memory during auto memory operation.

⑲ **CATV indicator**

When the CATV button is pressed to on, this indicator lights to show that the receiver is set to receive CATV programs.

⑳ **REMOTE SENSOR**

This window receives signals from the remote control unit. Do not obstruct it.

㉑ **RECEIVED/POWER STANDBY indicator**

This indicator lights when a signal is received from the remote control unit. It remains lit continuously when the POWER button is off, to show that the receiver is in the POWER STANDBY mode.

㉒ **SURROUND**

Press this button when surround sound is required; the "DIGITAL SURROUND" indicator lights.

When the surround sound is not required, press this button again; the indicator goes out.

Note:

- **With the SURROUND button set to off, no sound will be output from the rear speakers connected the SURROUND SPEAKERS terminals.**

㉓ **SPEAKERS**

SPEAKERS 1: Press to switch the speakers connected to the SPEAKERS 1 terminals on or off.

SPEAKERS 2: Press to switch the speakers connected to the SPEAKERS 2 terminals on or off.

Note:

- **When speakers are connected to only one set of SPEAKERS terminals, press only the SPEAKERS button of the system connected; If both buttons are pressed, sound will not be heard from either speaker system. When two pairs of speakers are connected and either or both the SPEAKERS buttons are pressed, sound will be heard from the speakers selected.**

● PHONES (Headphone jack)

Plug stereo headphones into this jack for private listening and to monitor recording. If you want to listen to sound from the headphones only, press the SPEAKERS buttons to OFF.

● DIGITAL SURROUND

When the surround sound effect is required, first press the SURROUND button, then press any of the following buttons. The indicator above the selected button will light.

DOLBY SURROUND: Press this button when playing back a program source encoded with Dolby Surround sound. Dynamic and three-dimensional surround sound (as in a movie theater) will be obtained.

HALL: When this button is pressed while listening to a normal stereo source, the sound field will be expanded and a surround sound effect with a hall ambience will be obtained.

STADIUM: When this button is pressed while listening to a normal stereo source, a dynamic surround sound effect with the feeling of a stadium is obtained.

- **DOLBY SURROUND***

Many video programs (video tapes and video discs) available today have a DD DOLBY SURROUND™ mark showing that they have been transcribed with a Dolby Stereo soundtrack. The soundtrack of these movies includes exactly the same surround sound information as the films you see in movie theaters. As the RX-777VBK/VSBK incorporates a Dolby Surround decoder circuit, you can get a similar effect to that in a movie theater equipped with Dolby Stereo, in your home. The RX-777VBK/VSBK will turn your listening room into a home movie theater!

* Manufactured under license from Dolby Laboratories Licensing Corporation. Additionally licensed under one or more of the following patents: U.S. Numbers 3,632,886, 3,746,792 and 3,959,590.
"DOLBY" and the double-D symbol DD are trademarks of Dolby Laboratories Licensing Corporation

DELAY TIME: This button is used to adjust the duration of reverberations so that the surround sound signal components included in the program source match the response of your listening room

Each time this button is pressed, the delay time setting is changed in the order → 1 → 2 → 3. The indicator above the number selected number will light.

1 :Select this position when the listeners and the rear speakers are relatively distant from the front speakers.
2 :Normally set to this position. (First select this position and play the source, then, adjust to find the most effective position for the program source.)
3 :Select this position when the listeners and the rear speakers are relatively close to the front speakers.

REAR LEVEL: Adjust the level of the signal output to the REAR PRE OUT terminals and the rear speakers relative to that of the front speakers with these buttons. Press the > button to increase the relative volume level and press the < button to decrease it. The set level is shown in the display for about 5 seconds.

㉖ SOURCE

– VIDEO –

VCR 1: Press this button to watch and listen to the source from the VCR connected to the VCR 1 terminals.

VCR 2: Press this button to watch and listen to the source from the VCR connected to the VCR 2 terminals.

– AUDIO –

PHONO: Press to listen to a turntable connected to the PHONO terminals.

CD: Press this button to listen to a compact disc player connected to the CD terminals.

FM: Press this button to listen to an FM broadcast.

AM: Press this button to listen to an AM broadcast.

TAPE 1: Press to listen to a tape deck connected to the TAPE 1 terminals.

㉗ MONITOR

TAPE 2: Press this button to listen to a tape deck connected to the TAPE 2 terminals. If this button is pressed again, it will release this function so that the source selected by another source selected button can be heard.

㉘ LOUDNESS

Press this button to compensate for the ear's lower sensitivity at low listening levels.

㉙ CATV

Use this button when a separate CATV Antenna Control Unit is used. When connecting the CATV cable to receive CATV programs or if the FM antenna is connected to "CATV IN" of the CATV Antenna Control Unit for the reception of FM broadcasts, push this button so that the CATV indicator lights. Even when the CATV indicator is not lit, you can listen to broadcasts received by the antenna connected to the EXT. FM IN terminal of the CATV antenna control unit. CATV button functions can also be stored in each preset station together with the frequency.

㉚ FM MODE/MUTE

For normal FM receptio~~n,~~ for the automatic elimination of interstation noise, press this button so that FM MODE "AUTO" and FM MUTE "ON" light in the display.

When receiving a weak or noisy FM stereo broadcast, press this button so that FM MODE "MONO" and FM MUTE "OFF" light; the broadcast will be heard in mono but reception will be clearer.

㉛ TUNER 10-KEY (1 to 10, +10)

Up to 40 FM and AM broadcast frequencies can be preset in this receiver's memory. After presetting, select the desired channel by inputting the preset channel number with these buttons. When selecting a preset channel numbered "1" to "10", just press the corresponding numeric button. When selecting preset channels numbered "11" or above, first press the +10 button the required number of times, then press a button from 1 to 10.

For example, to select preset channel 35, first press the +10 key three times, then press 5. Or, to select preset channel "40", press +10 key three times, then 10.

When the desired preset channel is recalled, the display shows the preset channel number and the frequency.

㉜ PRESET SCAN

This lets you scan preset channels to find a broadcast you want to listen to. When the PRESET SCAN button is pressed, preset scanning starts. If you have tuned to the current station using the 10-KEY keypad, the tuner scan to the next higher preset channel and the broadcast is received for about 4 seconds with the preset channel number blinking. It then tunes to higher preset channels in sequence. When it reaches the top preset channel, it goes to the bottom channel and scans up until it reaches the original channel, at which point it stops.

If you have tuned to the current station in any other way scanning will start from preset channel 1 and finish after preset channel 40 has been received, then the broadcast being received before preset scanning was started will be heard again. When you hear a broadcast you want to listen to, press the PRESET SCAN button again to stop preset scanning.

㉝ MEMORY

Press this button, and the MEMORY indicator will light to show that it is ready to receive a memory setting. Pressing the station select button while the MEMORY indicator is lit (for about five seconds) store the station in the specified memory. At this time, the channel number is shown in the display.

㉞ AUTO MEMORY

Press this button and one of the PRESET CHANNEL numeric keys to scan and preset to broadcasts automatically. Starting from the frequency being displayed, the tuner will scan to higher frequencies until a broadcast is received. The TUNED indicator will light and the channel number you have pressed earlier will flicker for 3 seconds. If you do not wish to store this frequency in memory, press this button within 4 seconds, and scanning will start again. Otherwise, the MEMORY indicator and channel number will light together and the frequency will be stored in the channel memory, after which up-scanning will continue. This process continues until the preset channel with the highest frequency is stored in memory. If the frequency reaches its upper limit, the auto memory function stops and the channel number with the highest frequency in the memory will be shown. If the upper limit of the frequency band is reached before this happens, the upper limit frequency is shown. Otherwise when this process ends, the last frequency tuned to and its corresponding channel number are displayed.

Note:

- **To cancel the auto memory function, press any of the buttons in the tuner section other than the AUTO MEMORY button.**

㉟ TUNING DOWN/UP

DOWN (<): Press this button to tune to a lower frequency.

UP (>): Press this button to tune to a higher frequency.

Holding either button pressed for more than 1 second and then releasing it starts auto tuning. When a broadcast is received, tuning will stop. If either button is held down, scanning will continue even when a broadcast is received. In auto tuning, pressing either button stops scanning. When tuning toward higher frequencies, if the upper limit frequency is reached, the frequency will change to the lower limit and then auto tuning restarts in the direction of increasing frequencies. When tuning toward lower frequencies, if the lower limit is reached, the frequency will change to the upper limit and auto tuning restarts in the direction of lower frequencies. The same operation is also performed in AM tuning.

Each time these buttons are tapped, the FM frequency will change in 100 kHz steps, and the AM frequency in 10 kHz steps.

㊱ VOLUME

Adjust the volume of speakers or headphones with this button. Press the > (up) side once to increase the volume by one step, and the < (down) side once to decrease it by one step; this level is shown by the VOLUME indicator. Holding down either side of this button will cause the volume to rise or fall continuously.

㊲ MUTE

Press this button and the MUTE indicator will light and the sound will be muted instantaneously. To restore the volume to its original level, press this button again, or press the BALANCE or VOLUME button.

㊳ BALANCE

Use to adjust the balance between the left and right speakers. Tap the L side to shift the balance to the left by one step and the R side to shift to the right. Holding the button pressed changes the balance continuously. The BALANCE indicator in the display shows the current balance setting.

OPERATION

Before use

Connect each component correctly, and then plug the power cord into an AC wall outlet.

Basic operation

1. Press the POWER button to on.
2. Select the speaker system with the SPEAKERS buttons.
3. Proceed through the steps described below, as required.
4. Adjust the volume and the balance to your requirement.
5. Use the SEA buttons to obtain the tone you want to hear.
6. When a surround sound effect is required, press the SURROUND button and related buttons. (Refer to page 13.)

Presetting to selected stations (FM AM or CATV)

There are two ways to preset stations using the TUNING buttons: **A. AUTO ‘TUNING/MANUAL TUNING, B. AUTO MEMORY FUNCTION.**

A. –AUTO TUNING/MANUAL TUNING –

(Refer to ㉟ TUNING DOWN/UP buttons.)

1. Press the FM or AM button.
   When tuning to a CATV FM broadcast, press the FM button, then the CATV button.
2. Tune to a station by pressing the TUNING DOWN/UP button for auto tuning or tapping it for manual tuning.
3. Press the MEMORY button so that the MEMORY indicator lights.
4. Press any of the TUNER 10-KEY keypad buttons to be stored in memory as the preset channel number.
5. Perform the same pre-tuning procedure (steps 2, 3, 4) for the remaining channels.
   Up to 40 stations can be preset for FM and AM stations in total.

B. – How to operate the AUTO MEMORY FUNCTION –

(Refer to ㉞ AUTO MEMORY button.)

1. Press the FM or AM button.
   When tuning to a CATV FM broadcast, press the FM button, then the CATV button.
2. Display the frequency from which scanning is to start using the TUNING DOWN/UP button.
3. Press the AUTO MEMORY button and one of the 10-KEY buttons. The MEMORY indicator flickers and auto scanning starts from the displayed frequency towards higher frequencies. When a broadcast is received, the TUNED indicator lights and the selected station number flashes. If you do not press the AUTO MEMORY button again, the MEMORY indicator and the channel number light together and the frequency is stored in memory. This continues until the preset channel with the highest number has a frequency in its memory or auto scanning reaches the highest frequency.

Listening to broadcasts

1. Press the FM or AM button so taht the "FM" or "AM" is displayed in the SOURCE OPERATION indicator.
2. Select the desired preset channel by pressing the TUNER 10-KEY buttons. The channel number corresponding to the buttons pressed is shown in the display.

Notes:

- **Adjust the antenna so that the "TUNED" indicator is lit.**
- **When FM broadcast signals are too weak to be received satisfactorily, press the FM MODE/MUTE button so "MONO/OFF" is shown.**
- **For the reception of AM broadcasts, set the loop antenna to the position where reception is best.**
- **Before listening to broadcasts, first preset the stations correctly; if they are not pre-tuning accurately, reception will be noisy.**

Listening to records

1. Press the PHONO button so that the "PHONO" is displayed in the SOURCE OPERATION indicator.
2. Operate the turntable as described in its operation manual.

Notes:

- **Use a turntable with an MM (moving magnet) cartridge.**
- **If your turntable has a separate ground lead, connect it to the rear panel GND terminal.**

Listening to CD

1. Press the CD button so that the "CD" is displayed in the SOURCE OPERATION indicator.
2. Operate the CD player as described in its operation manual.

Listening to tapes

1. Press the TAPE 1 or 2 button so that the "TAPE 1" is displayed in the SOURCE OPERATION indicator or the "TAPE 2 MONITOR" indicator lights.
2. Operate the tape deck for playback as described in its operation manual.

Watching and listening to VCR 1 (VCR 2)

1. Press the VCR 1 (VCR 2) button so that the SOURCE OPERATION and VISUAL indicators light and "VCR 1" ("VCR 2") is shown with each one.
2. Operate the video unit as described in its operation manual.

Listening to another audio source, while watching VCR 1 (VCR 2) (Fig. 14)

When you want to listen to an audio source while watching VCR 1 (VCR 2), press the ㉖ VIDEO SOURCE button to watch a video source (such as VCR 1) and then the ㉗ AUDIO SOURCE button to hear an audio source (such as a CD). By doint so, you can enjoy the picture of VCR 1 and the sound of a CD.

Note:

- **Connect the video and audio signal cords of the video unit to the AUDIO and VIDEO terminals of this unit. If a unit other than a video unit is connected, connect it to the AUDIO terminals only.**

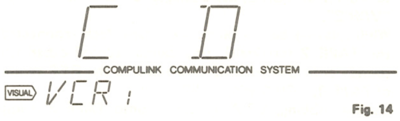


Fig. 14

Recording tapes

– Recording from records –

1. Press the PHONO button so that the "PHONO" is displayed in the SOURCE OPERATION indicator.
2. Operate the turntable.
3. Operate the tape deck for recording.

– Recording from other sources (CD, FM, AM, VCR 1, VCR 2) –

Press the button corresponding to the source to be recorded. All other operations are identical to those when recording from records.

Note:

- **The sound you hear from the speakers or headphones is the source sound (record playback sound in this case), not the signal recorded on the tape.**

– How to operate the monitor while recording onto a tape deck –

1. Connect a 3-head tape deck to the TAPE 2 terminals.
2. Make sure that the signal cords are connected to the PLAY and REC terminals, and remove the remote cable connected to the tape deck.
3. Select the source from which you want to record by depressing the corresponding SOURCE select button.
4. Operate the tape deck for recording as described in its operation manual.
5. By playing the source component, you can record on the tape deck.
6. While recording on the tape deck, the recorded sound can be heard by pressing the TAPE 2 button on the front panel or remote control unit.

Tape dubbing

To perform tape dubbing, two tape recorders should be connected, one to the TAPE 1 terminals (called the "No. 1" tape deck) and another to the TAPE 2 (called the "No. 2" tape deck).

– Dubbing from deck No. 1 to deck No. 2 –

1. Press the TAPE 1 button. Sound can be monitored through speakers or headphones.
2. Operate the No. 2 tape deck for recording.
3. Operate the No. 1 tape deck for playback.

– Dubbing from deck No. 2 to deck No. 1 –

1. Press the TAPE 2 button. Sound can be monitored through speakers or headphones.
2. Operate the No. 1 tape deck for recording.
3. Operate the No. 2 tape deck for playback.

Notes:

- **When dubbing from the tape deck (connected to the TAPE 2 terminals) onto the other tape deck, select a button other than "TAPE 1".**
- **When dubbing the SOUND signal from the No. 2 tape deck to VCR 1 or VCR 2, use a selector other than "VCR 1" or "VCR 2".**
- **While playing back a tape on the tape deck (connected to the TAPE 2 terminals), you cannot record other source sounds onto components connected to the REC terminals of TAPE 1, VCR 1 and VCR 2.**
- **During dubbing, S.E.A. recording onto TAPE 2 is impossible.**
- **Dubbing is possible between any of TAPE 1, VCR 1 and VCR 2, and S.E.A. recording is also possible.**
- **Dubbing from VCR 1 to VCR 2 or from VCR 2 to VCR 1 is also possible. In this case, press the source side button (VCR 1 or VCR 2).**

Using stereo headphones

Stereo headphones can be plugged into the front panel PHONES jack. The signal from this jack is independent of the speakers.

1. Plug the stereo headphones into the PHONES jack for private listening.
2. To listen through headphones while listening to the speakers, press the appropriate SPEAKERS button to ON (▬).

Note:

- **Pull out the headphone plug when not in use.**

How to perform surround sound play

Place the front and rear speaker systems appropriately referring to "Examples of Speaker Placement in Surround Sound System" on page 14.

1. Press the SURROUND button so that the "DIGITAL SURROUND" indicator lights.
2. Press the desired surround selector mode button (DOLBY SURROUND, HALL or STADIUM).

Note:

- **When playing a video program source with a DOLBY SURROUND™ mark on its case, press the DOLBY SURROUND button, and when playing back a normal stereo source, press the HALL or STADIUM button.**

3. Set the delay time appropriately with the DELAY TIME buttons.
4. Play back the program source.
5. Adjust the overall volume level of the front and rear speakers with the VOLUME button, then adjust the relative volume of the rear speakers with the REAR LEVEL buttons.

Notes:

- **For details of buttons and indicators in the above operations, refer to the description of the "Front Panel" section.**
- **When playing back or recording in the DOLBY SURROUND mode, be sure to set the ❸ SEA buttons to OFF to obtain the original information included in the program correctly.**

EXAMPLES OF SPEAKER PLACEMENT IN SURROUND SOUND SYSTEM

The following diagrams are typical examples for surround sound reproduction.

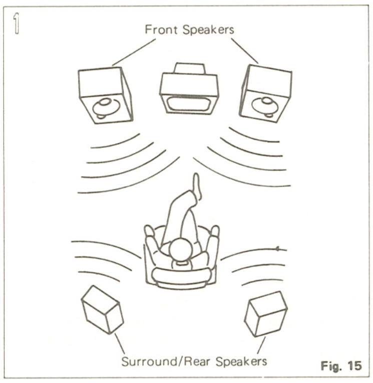


Fig. 15

1. A standard speaker arrangement for surround sound reproduction.
   This configuration gives most effective surround sound with enriched "presence".
   Most suitable for playing program sources encoded with Dolby Surround sound.

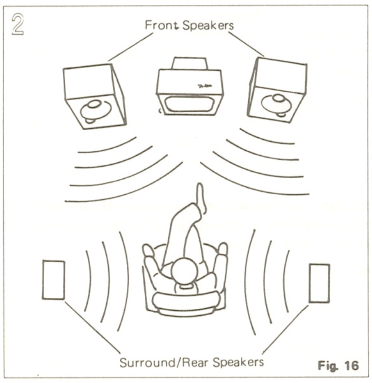


Fig. 16

2. Place the surround speakers at the left and right sides of the listening position. With this configuration, the separation between the front and rear may be slightly decreased, however, the extension of the sound field will be much wider.
   With this placement, set the surround speakers so they are higher than listeners' ears and direct them slightly downward to get a wider sound field.

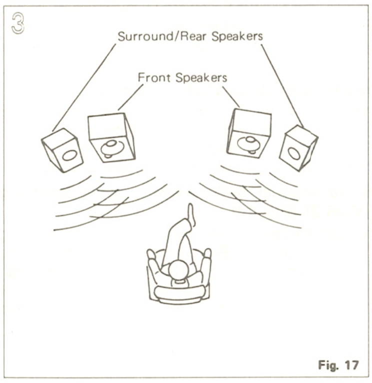


Fig. 17

3. Place four speakers in front of the listening position. Although the feeling of movement will be slightly decreased when playing video programs, it gives more natural width to the sound field.
   This is suitable when you want a stable sound field (or "presence"), especially when playing normal stereo audio sources.

Note:

- **If the walls are made of hard wood or plaster, when the surround speakers are placed facing towards the walls (reversing the placement illustrated in the above examples 2 or 3), a more favorable effect may be obtained.**

Movie programs, etc. encoded with the Dolby Surround system are produced so that the volume balance between the front channels and the surround channels is set by the producer of the individual movie. For this reason, it is recommended that you do not set the level of the surround channel too high, to obtain a Dolby Surround sound effect which is closer to that intended.

REMOTE CONTROL UNIT (RM-SR777/RM-SR777S)

Refer to page 23 and keep it open.

(RM-SR777 only)

> The RM-SR777 remote control unit can be programmed to perform up to 48 operations of other remote control units, even from other manufacturers, so that it can be used in place these other remote controls.
> For more details, refer to page 18.

❶ **USE/LEARN switch**
When programming the remote control, set this switch to the LEARN position. Later, when recalling functions, set it to USE.

❷ **ERROR indicator (Red)**
This indicator lights when checking memorized key functions, or when a key is pressed by mistake.

❸ **SEND/LEARN indicator (Green)**
In the normal operation mode (with the USE/LEARN switch set to USE), this indicator lights to show that a command has been transmitted.
In the LEARN mode, programming should be performed while this indicator is blinking. It goes out when the operation has been completed.

❹ **1/2 (Learning key mode select switch)**
The "A" to "X" keys can be programmed with a maximum of 24 functions independently with this switch set to 1 and 2, for a total of 48 functions.

❺ **Learning keys**
Each of these 24 keys can be programmed with the functions of another remote control. With two switch setting, up to 48 functions can be held in the memory of this remote control unit.

(Common to RM-SR777/RM-SR777S)

❻ **POWER**
AUDIO: Press this button to switch the RX-777VBK/RX-777VSBK's power on or off.
TV: For use with a TV. Press this button to switch the TV's power on or off.
VCR: For use with a VCR. Press this button to switch the VCR's power on or off.

Notes:
- **Provided one of JVC-specified VCRs and TVs is used, it can be remote-controlled.**
- **Before operating the television or VCR by remote control, be sure to read the television or VCR instruction manual carefully.**

❼ **SLEEP (SLEEP TIMER)**
When this button is pressed, its indicator lights. Each time this button is pressed, the sleep timer's setting increases in 10-minute increments up to 80 minutes. The time set is shown on the display of the RX-777VBK/RX-777VSBK.

Note:
- **The sleep timer set time and the time remaining before power will be switched off are shown in the display.**

❽ **PLAY MODE**
Press one of these buttons to select a JVC CD AUTO CHANGER.
CONTINUE: Press this button to listen to compact discs loaded in the CD magazine in numerical order regardless of the programmed playback setting.
PRGM: Press this button to listen to the compact discs in programmed order.
MAG. PRGM: Press this button to listen to the compact discs in the order of the program previously stored for each magazine.
When any play MODE button is pressed, "MODE" is shown in the display.

❾ **CD CHANGER**
These buttons are for use when a disc or track number is to be specified. After pressing one of these buttons, specify the disc or track number with the ⓯ 10-KEY buttons.
DISC: To specify a disc No., press this button then press the ⓯ 10-KEY buttons ($\boxed{1}$ – $\boxed{7/P}$) corresponding to the disc. When the 10-KEY buttons are pressed, "–1–" . . . "–P–" will be shown in the display.
TRACK: To specify a track No., press this button first then press ⓯ 10-KEY buttons ($\boxed{1}$ – $\boxed{10}$, $\boxed{+10}$, $\boxed{0}$) corresponding to the track. When the 10-KEY buttons are pressed; "1", ... "10", "+10", "0" will be shown in the display.

Notes:
- **To play a compact disc, press ⓴ $\boxed{\blacktriangleright}$ button.**
- **For details of the CD auto changer, refer to its instruction book.**

❿ **FM**
Press this button to listen to an FM broadcast.

⓫ **AM**
Press this button to listen to an AM broadcast.

⓬ **VCR 1**
Press this button to play (listen to and watch) a VCR connected to the VCR 1 terminals.

⓭ **VCR 2**
Press this button to play (listen to and watch) the VCR connected to the VCR 2 terminals.

⓮ **TV CH**
Press this button then use ⓯ 10-KEY buttons ($\boxed{1}$ – $\boxed{9}$, $\boxed{0}$) to select the channel.

⓯ **10-KEY ($\boxed{1}$ – $\boxed{10}$, $\boxed{0}$, $\boxed{+10}$)**
These buttons are used for direct access to FM/AM preset channels, or TV channels or VCR channels, as well as to select the track No. of compact discs, the disc No. of the CD changer or the tune number of DAT tape.
FM/AM: After the ❿ FM or ⓫ AM button has been pressed, select the required preset channel. The $\boxed{0}$ button is not used at this time. When selecting preset channel 10 or higher, first press the $\boxed{+10}$ button the required number of times, then one of the $\boxed{1}$ to $\boxed{10}$ buttons. (See Ex. 1)
CD/DAT: After pressing the ⓴ CD or ㉔ DAT button select the track No. or tune No. to be listened to or to be programmed.
When selecting a track or tune with a number of 10 or higher, first press the $\boxed{+10}$ button the required number of times, then one of the $\boxed{1}$ to $\boxed{10}$ buttons. (See Ex. 1)

Notes:
- **With certain CD players and DAT decks, the track or tune number is selected using buttons from $\boxed{1}$ to $\boxed{9}$ and $\boxed{0}$. In such a case, to select "6" (for example), press $\boxed{6}$. To select "23", press $\boxed{2}$, then $\boxed{3}$.**
- **For details of operation, refer to the instruction book provided with the CD player or DAT deck.**

RM-SR777

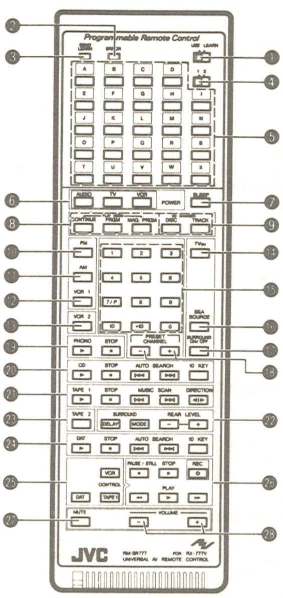


Fig. 22

RM-SR777S

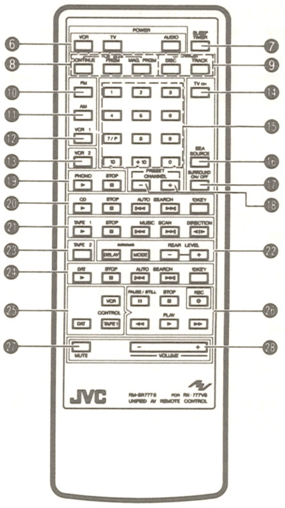


Fig. 23

< Examples 1 >

5: Press [5] .
10: Press [10] .
17: Press [+10] once, then press [7] .
20: Press [+10] once, then press [10] .
25: Press [+10] twice, then press [5] .

TV/VCR 1: After pressing the ⑪ TV CH or ⑫ VCR 1 button, select the required channel using buttons [1] to [9] and [0] . Depending on the VCR or TV used, it may be necessary to press the [0] button first to select a one-digit number. (See Ex. 2)

Note:

- **For details of operation, refer to the instruction book of the VCR or TV.**

< Examples 2 >

4: Press [4] . Or, press [0] then [4] .
13: Press [1] , then [3] .

⑯ SEA SOURCE

Press this button to listen to the source with S.E.A. compensation. When the SEA SOURCE button is pressed, "ON" is shown and the "SOURCE" indicator lights; when it is pressed again, "OFF" is shown and "SOURCE" goes out.

⑰ SURROUND ON/OFF

Press this button to switch the SURROUND function "ON" and "OFF". When the SURROUND ON/OFF button is pressed once, "ON" is shown and "DIGITAL SURROUND" indicator lights in the display; when it is pressed again, "OFF" is shown and "DIGITAL SURROUND" goes out.

⑱ PRESET CHANNEL ([−] , [+])

When the FM, AM, TV CH or VCR 1 button has been pressed; preset stations or TV channels can be selected by using these buttons to scan the available stations or channels in either direction.

⑲ PHONO

PHONO ([▶]): Press this button to switch the source to "PHONO" and to start playing a record.
STOP ([■]): Press this button to stop playing the record.

Note:

- **When the [▶] or [■] button is pressed, the corresponding symbol is shown in the display.**

⑳ CD

CD ([▶]): Press this button to switch the source to "CD" and to start playing a compact disc.
STOP ([■]): Press this button to stop playing the compact disc.
AUTO SEARCH:
([⏮]): Press this button to move the pickup back to the beginning of the current tune. Each time the button is pressed, the pickup will skip to the beginning of the previous tune. Keeping this button pressed causes the pickup to skip back continuously.
([⏭]): Press this button to move the pickup to the beginning of the next tune. Each time this button is pressed, the pickup moves forward by one tune. Keeping this button pressed causes the pickup to skip forward continuously.
10 KEY: Press this button to use the ⑮ 10-KEY buttons to select the CD track No.

Note:

- **When the [▶] , [■] , [⏮] or [⏭] button is pressed, the corresponding symbol is shown in the display.**

㉑ TAPE 1

TAPE 1 ([▶]): Press this button to switch the source to "TAPE 1" and to start playing a tape in the TAPE 1 cassette deck.
STOP ([■]): Press this button to stop the cassette deck.
MUSIC SCAN:
([⏮]): Press this button to select the tune by fast-winding the tape from right to left.
([⏭]): Press this button to select the tune by fast-winding the tape from left to right.
DIRECTION ([◀▶]): Press this button to change the direction of tape travel.

Note:

- **When the [▶] , [■] , [⏮] or [⏭] button is pressed, the corresponding symbol is shown in the display.**

㉒ SURROUND

For the surround sound effect, first press ⑰ SURROUND ON/OFF button to activate surround sound circuit, then use these buttons.
([DELAY]): Each time this button is pressed, the delay time setting is changed in the order ↱1 → 2 → 3┐.
([MODE]): Each time this button is pressed, the surround mode is changed in the order ↱DOLBY SURROUND → HALL → STADIUM┐.
The display shows ↱"DOLBY" → "HALL" → "STDUM"┐ in order.
REAR LEVEL ([−] , [+]): Adjust the relative volume of the rear speakers with these buttons. Press the [+] button to increase the volume, and press the [−] button decrease it.

Note:

- **Setting using these buttons will be shown in the display, in the same way as when operating the front panel controls. For details, refer to the description of the front panel.**

㉓ TAPE 2

Press this button to listen to the source connected to the TAPE 2 terminals, and press it again to disengage the source.

Note:

- **The operating indications "ON" or "OFF" will be shown in the display.**

㉔ DAT

DAT ([▶]): Press this button to start a digital audio tape.
STOP ([■]): Press this button to stop a digital audio tape.
AUTO SERACH:
([⏮]): Press this button to select the beginning of the corrent tune.
([⏭]): Press this button to select the beginning of the next tune.
10-KEY: Press this button to use the ⑮ 10-KEY buttons to select a DAT track.

Notes:

- **Connect a DAT deck to the TAPE 2 terminals of the receiver.**
- **When operating the DAT deck, press ㉓ TAPE 2 button first, then press ㉔ DAT operation buttons, or CONTROL DAT buttons (㉕ , ㉖).**
- **When the [▶] , [■] , [⏮] or [⏭] button is pressed, the corresponding symbol is shown in the display.**
- **The [⏮] and [⏭] buttons of this unit have the same function as the [⏮] and [⏭] buttons on the DAT deck.**

㉕ CONTROL

VCR: Press this button to operate the VCR connected to the VCR 1 or 2 terminals.
TAPE 1: Press this button to operate the cassette deck connected to the TAPE 1 terminals.
DAT: Press this button to operate the digital audio tape deck connected to the TAPE 2 terminals.

㉖ TAPE 1/VCR/DAT CONTROL

PAUSE/STILL ([⏸]): Press this button to pause during playback or recording. To release, press the PLAY button.
STOP ([■]): Press this button to stop operation.
REC ([○]): Press the PLAY button while pressing this button to start recording.
When TAPE 1 or DAT is selected, the "DAT/TAPE REC" indicator lights for about 5 seconds.
([◀◀]): For a cassette deck or DAT deck: Press this button to quickly wind the tape from right to left.
For a VCR: Press this button to set from the stop mode to the rewind mode. During playback, press this button for high-speed playback in the reverse direction (Shuttle search).
PLAY ([▶]): Press this button to play a tape.
([▶▶]): For a cassette deck or DAT deck: Press this button to quickly wind the tape from left to right.
For a VCR: Press this button to transfer from the stop mode to the fast-forward mode. During playback, press this button for high-speed playback in the forward direction (Shuttle search).

Note:

- **The symbols corresponding to the buttons [⏸] , [■] , [◀◀] and [▶▶] will be shown in the display. They are not shown in the case of a VCR.**

㉗ MUTE

Press this button to instantly mute the sound. To return the volume to its original level, press this button again, or press the BALANCE or VOLUME button.

Note:

- **The operating indications of VOL "+" or VOL "−" and "MUTE", "OFF" will be shown in the display.**

㉘ VOLUME ([−] , [+])

Press the [+] button to increase the volume and the [−] button to decrease it.

Batteries

- **How to install batteries (Fig. 18/19)**

1. Slide the cover of the battery case in the direction of the arrow to remove it.
2. Install the batteries with the correct polarity.
   (It is recommended that the batteries with a longer service life are used for the RM-SR777.)
   The following batteries are required for the remote control unit.
   * RM-SR777 (provided with the RX-777VBK): "AAA" x 4
   * RM-SR777S (provided with the RX-777VSBK): "AA" x 2
3. Re-install the cover of the battery case.

- **How to use the batteries**

Improper use of the batteries can cause leakage or damage. So, take the following precautions:

1. Install batteries with their polarities properly placed.
2. Do not mix new and used batteries.
3. Use the same brand and type of batteries because otherwise the voltages may differ sightly.
4. If the remote control unit will not be used for a long time remove the batteries.
   Also, follow the instructions on the batteries.

- **When to replace batteries**

When the distance from which you can use the remote control unit becomes shorter, replace both batteries.

Notes:

- **If the remote control is used too near the receiver during AM reception, it may cause interference.**
- **The remote control can normally be used up to about 8 m (26 ft) from the receiver.**
- **When replacing the batteries for the RM-SR777, do it in less than 3 minutes or the contents of memory will be lost.**

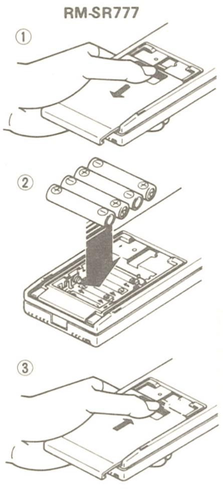


Fig. 18

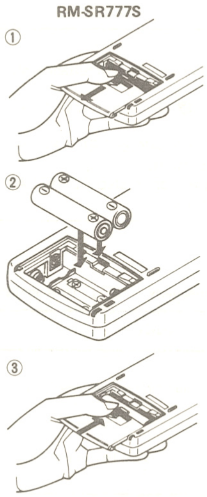


Fig. 19

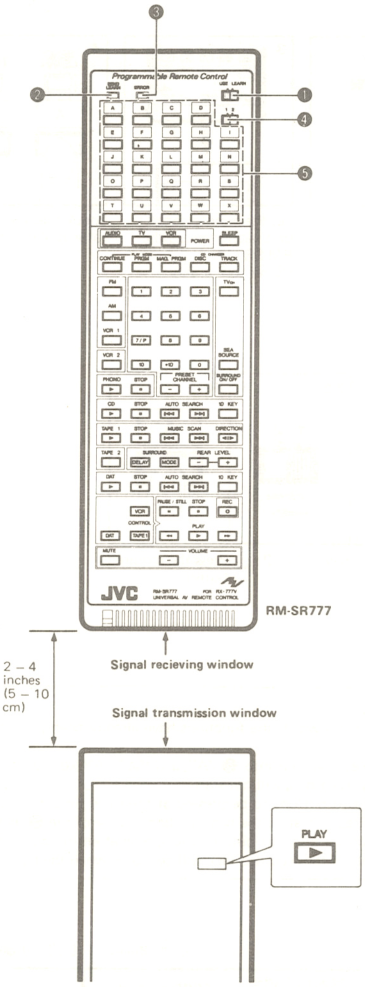

❶
❷
❸
❹
❺
Programmable Remote Control
JVC
RM-SR777
Signal recieving window
2 – 4 inches (5 – 10 cm)
Signal transmission window
PLAY
Remote control unit other component

Fig. 20

How to program key functions (RM-SR777)

The functions of remote control units from other manufacturers can be memorized (programmed) by the RM-SR777. Learning buttons ❺ "A" to "X" can be programmed with up to 24 key functions, with the mode select switch ❹ set to 1 and 2, for a total of 48 key functions.

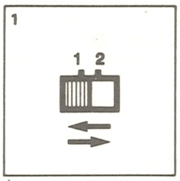
Example: For button ❺ "A", Mode 1, to memorize the "PLAY" control function of a remote control unit.

1. Select Mode 1 with ❹ Mode select switch.
2. Set the ❶ USE/LEARN switch to the LEARN position.
3. Put the two remote controls on a table with the transmission window of the remote control the functions of which are to be learned against the signal receiving window at the rear of the RM-SR777. Leave a distance of about 2 – 4 inches (5 – 10 cm) between them.
4. Press button "A" of the RM-SR777 and release it. The SEND/LEARN indicator will blink.
   (If ❸ ERROR indicator lights at the same time, a function has already been memorized in ❺ "A". At this time, if the button is depressed continuously, the previously memorized function will be erased and it will be ready to memorize the new function. If the previous function is still required, select another button, ❺ "B" to "X".)
5. While the SEND/LEARN indicator is blinking (for about 10 seconds), press the button of the other remote control unit the function of which is to be memorized ("PLAY" in this case).
   When memorizing a setting, both the ERROR and SEND/LEARN indicators light. If the ERROR indicator goes out and only the SEND/LEARN indicator remains lit, it shows that the memorizing operation has been completed.
   Keep pressing the button of the other remote control unit while the ERROR indicator is lit.
   At this time, if the SEND/LEARN indicator does not blink and only the ERROR indicator lights, the operation has not been completed. After the indicator goes out, retry the operation from step 4.
6. To memorize other functions into other learning buttons of the RM-SR777, repeat steps 4 and 5 after the SEND/LEARN indicator has gone out.
7. To operate these buttons after the memorizing operation is complete, set the ❶ USE/LEARN switch to the USE position. Also, when functions have been memorized in both Modes 1 and 2, first set ❹ mode select switch to the required mode, then press the desired button.

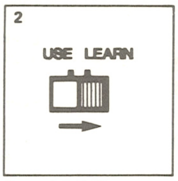
Notes:

- **In step 4, if the ERROR indicator lights when one of the learning buttons is pressed, it shows that the incorrect button has been pressed. Select another button.**
- **In step 5, be sure to perform the memorizing operation while the SEND/LEARN indicator is blinking (for about 10 seconds).**
  After the indicator goes out, the memorizing operation is impossible. In such a case, repeat operations from step 4.
- **With certain remote control units, functions may not be memorized correctly by the RM-SR777.**

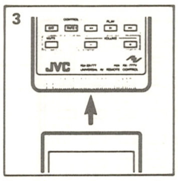
How to memorize



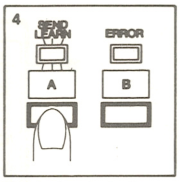
Select 1 or 2.



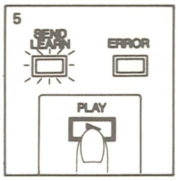
Set to LEARN.



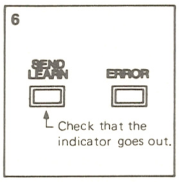
Set the remote control unit facing toward the RM-SR777. (Refer to Fig. 20)



Check that the indicator is blinking.



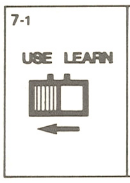
While it is blinking, press the required button. When the SEND/LEARN indicator lights continuously, the operation is complete.



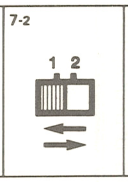
Check that the indicator goes out.

To memorize other functions, repeat steps 4 and 5. (After checking that the indicator has gone out.)

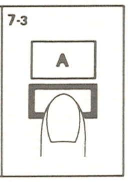
How to operate



Set to USE.



Select 1 or 2.



Press the required button.

CAUTION:
If two or more of ❺ the learning buttons in which the functions have already been programmed are pressed simultaneously, there will be no operation.
Example: After programming the REC key function into ❺ "A", and the PLAY key function into ❺ "B", if buttons "A" and "B" are pressed simultaneously, recording will not start.
When programming a function requiring two buttons to be pressed at the same time, such as REC + PLAY, or REC + PAUSE, press the two buttons simultaneously in Step 5 to store the two functions in one of the ❺ learning buttons.

- When programming two or more functions into one button, pay special attention during the operation in Step 7-3. If PLAY functions are programmed, the contents of the recorded tape will be erased when the button is pressed.

Indicator lighting

✳ : Blinks ☀ : Lights continuously □ : Does not light

Button on RM-SR777	Button on other remote control	SEND/LEARN indicator	ERROR indicator	Status
Step 4 A ❺	——	✳	□	Button in which no function has been memorized
Step 4 A ❺	——	✳	☀	Button in which a function has been memorized
——	Step 5 PLAY	☀	☀	While memorizing a setting
		☀	□	Memorizing complete
		□	☀	Memorizing incomplete
FM	——	□	☀	Incorrect button is pressed

How to use the function seals and template (Fig. 21)
The function identification seals and the template are provided for use with the RM-SR777.
Use them referring to Fig. 21, as requied.

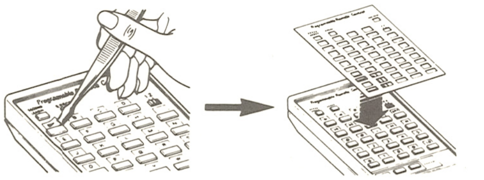


Fig. 21

OPERATION WITH THE REMOTE CONTROL UNIT (RM-SR777/RM-SR777S)

Refer to page 23 for the diagrams.

- A "COMPU LINK" component (such as an amplifier, receiver, tuner, CD player, cassette deck, turntable or DAT deck) has one or two COMPU LINK-1/SYNCHRO jacks on its rear panel.
- The RM-SR777/RM-SR777S Remote Control Unit can be used to operate any "COMPU LINK" components connected to the receiver, without you having to press any front panel buttons.
- For example, when the CD player "PLAY" button on the remote control unit is pressed, the CD player starts playing automatically while the previous program source component stops automatically.
- Point the RM-SR777/RM-SR777S at the REMOTE SENSOR window of the receiver (RX-777VBK/RX-777VSBK) when using it.
  If the signal from the RM-SR777/RM-SR777S requires two or more components to operate simultaneously, the operation may be slightly delayed.
  If this happens, keep the button depressed until the required components begin operation.
  Certain other components receive signals directly from the remote control; if these are too far from the receiver, it may be difficult for them to detect signals from the RM-SR777/RM-SR777S.
  In this case, point the RM-SR777/RM-SR777S at the remote sensors of these components, and press the button again.
- Since the RM-SR777/RM-SR777S does not have buttons for the programming of preset stations or CD tracks, programming the tuner or CD player, etc. must be performed using the receiver or CD player's front panel buttons.

To listen to an FM or AM broadcast (Fig. 24)

1. ⑩ FM or ⑪ AM: Pressing this button (FM or AM) sets the ⑮ 10-KEY buttons ([1] – [10] , [+10]) to the FM or AM mode.
2. ⑮ 10-KEY ([1] – [10] , [+10]): For preset channels that the tuner is programmed to receive, check the number of the required channel, and press the button corresponding to that channel.
   For operation of the 10 KEY-buttons, refer to the item ⑮ 10-KEY in the "Remote Control Unit" section.
3. ⑱ PRESET CHANNEL (⊟ , ⊞): These buttons are to access adjacent channels below and above the current channel.

To watch and listen to a VCR (Fig. 25)

- Press the POWER button of the VCR to ON.
- Point the top (transmission window) of the RM-SR777/RM-SR777S at the VCR's remote sensor.

1. Press the ⑫ VCR 1 or ⑬ VCR 2 button.

   Note:
   - **The 10-KEY and PRESET CHANNEL ⊟ , ⊞ buttons are set to the VCR mode automatically.**
2. 10-KEY ([1] – [9] , [0]) (When you select VCR with the remote control):
   Press the required button to select the VCR channel.
   For operation of the 10-KEY buttons, refer to the item ⑮ 10-KEY in the "Remote Control Unit" section.
3. ⑱ PRESET CHANNEL (⊟ , ⊞): To move to a lower or higher channel. Each time you press the button, the channel below or above the current channel is selected.

To watch and listen to TV (Fig. 25)

Turn the power of the required component ON.

1. ⑭ TVCH: When this button is pressed, the TV mode is engaged.

   Note:
   - **The 10-KEY and PRESET CHANNEL ⊟ , ⊞ buttons are automatically set to the TV mode.**
2. ⑮ 10-KEY ([1] – [9] , [0]) (When you select TV with the remote control):
   Press the button corresponding to the required TV channel.
   For operation of the 10-KEY buttons, refer to the item ⑮ 10-KEY in the "Remote Control Unit" section.
3. ⑱ PRESET CHANNEL (⊟ , ⊞): To tune to a lower or higher channel. Each time you press the button, the channel below or above the current channel will be received.

   Note:
   - **When listening to TV sound via the RX-777VBK/VSBK, connect the audio output jacks of the TV to any unused [AUDIO] terminals, and select the source corresponding to the terminals used for TV sound.**

To play turntable or cassette deck (Fig. 26)

1. ⑲ PHONO [▶] or ㉑ TAPE 1 [▶] : Pressing the button switches the source selector automatically to "PHONO" or "TAPE 1", depending on the button you press, and playback starts.
2. ⑲ STOP [■] or ㉑ STOP [■] : Pressing this button stops the turntable or cassette deck.
3. ㉑ MUSIC SCAN [⏮] : Press this button to perform music scanning with the tape running to the left.
   ㉑ MUSIC SCAN [⏭] : Press this button to perform music scanning with the tape running to the right.
   - Each time these are pressed, the next tune is accessed; when they are kept pressed, the tape is fast-wound in the direction indicated.
4. ㉑ DIRECTION [◀▶] : Press this button to change the direction in which the tape is running.

To play CD or DAT (Fig. 27)

⑳ CD [▶] or ㉔ DAT [▶] : To select a track of a CD or a tune of a DAT using its number, press this button first and then press the ⑮ 10-KEY ([1] – [10] , [+10] , [0]) buttons to input the required number.

1. ⑳ CD [▶] or ㉕ DAT [▶] : Pressing this button starts playback.

   Note:
   - **To listen to music with a DAT deck connected to the TAPE 2 terminals, press ㉓ TAPE 2 button first and press ㉔ DAT [▶] button.**
2. ⑳ STOP [■] or ㉔ STOP [■] : Press this button to stop playing.
3. AUTO SEARCH [⏮] (● or ●): Pressing this button interrupts the selection being played and returns to the start of that selection.
   AUTO SEARCH [⏭] (● or ●): Pressing this button interrupts the music and moves to the start of the next selection.

   Note:
   - **Press once to advance to the next selection. To fast forward, keep this button depressed.**

CD AUTO CHANGER operation (Fig. 28)

1. **⑧ PLAY MODE**
   CONTINUE: Pressing this button plays the discs in the magazine sequentially, starting with Disc 1, regardless of the program.
   PRGM: Press this button to play the discs in the programmed order.
   MAG. PRGM: Set a magazine in place and press this button; the discs will be played back in the sequence programmed for the magazine.
   If the MAG.PRGM function does not operate with your CD auto changer, consult the instruction book of the CD auto changer.
2. **⑨ CD CHANGER**
   Pressing the DISC or TRACK button assigns the ⑮ 10-KEY buttons for use in operating the CD changer.
   (For operation of the 10-KEY buttons, refer to item ⑮ 10 KEY in the "Remote Control Unit" section.)
   DISC + 10 KEY ([1] – [7/P]): Press this button to specify a disc by its number in the magazine. In the case, press the DISC button before operating the 10-KEY buttons.
   TRACK + 10 KEY ([1] – [10] , [+10]): Press this key to specify a track by its number in the magazine' in the case, press the TRACK button before operating the 10-KEY buttons.

   Note:
   - **For details, consult the instruction book of the CD auto changer.**

How to use the CONTROL buttons (● and ●) (Fig. 29)

When operating the TAPE 1 cassette deck, DAT deck or VCR, each component can be controlled separately in a following way.

1. Press the required source button ([TAPE1] , [DAT] or [VCR]) among ● CONTROL buttons.
2. After pressing one of ● CONTROL buttons, operate the deck using ● TAPE 1/VCR/DAT CONTROL buttons as follows:
   - PLAY ([▶]): Press this button to play a tape. When the PLAY button of the TAPE 1, VCR or DAT is pressed, the source component selected previously will not stop. To stop it, press the corresponding STOP button.
   - [◀◀] or [▶▶] : Press these buttons to rewind/fast-forward tape; when fully wound, the auto play or auto rewind functions of the TAPE 1, VCR or DAT will be activated.
   - REC ([○]): Press the PLAY button while pressing this button to start recording.
   - PAUSE/STILL ([❚❚]): Press this button to pause during playback or recording. To release this function, press the PLAY button.
   - STOP ([■]): Press this button to stop operation.

Note:
- **When JVC VCRs are connected to VCR 1 and VCR 2, they will be controlled at the same time by the VCR control buttons. Be especially careful when recording.**

How to operate synchronized recording
1. Press [illegible] CONTROL TAPE1 button.
2. Using [illegible] TAPE 1/VCR/DAT CONTROL buttons, set the tape deck to the record-pause mode.

   Note:
   - **When setting the deck to the REC/PAUSE mode, press [illegible] REC ○ and [illegible] PAUSE/STILL ❚❚ buttons simultaneously. If [illegible] PLAY ▶ button is used, synchronized recording is impossible.**
3. Press [illegible] PHONO (▶) or [illegible] CD (▶) button corresponding to the source required to be recorded, to start recording on the tape deck automatically.

How to play surround sound (Fig. 30)
1. ⑰ SURROUND ON/OFF: Press this button to activate the surround sound function.
2. ㉒ SURROUND:
   MODE : Press this button to select the desired surround mode (from DOLBY SURROUND, HALL and STADIUM).
   DELAY : Press this button to select the appropriate delay time setting (from 1 to 3).
3. ㉒ REAR LEVEL (⊟ , ⊞): Using these buttons, set the volume of the rear speakers (relative to the front speaker volume).

Note:
- **For more details of the function of each button, refer to the description in the "Remote Control Unit" section.**

CAUTIONS:
- **When playing a DAT deck, connect it to the TAPE 2 terminals. (Also connect the remote cable between the DAT deck and this unit.)**
  To start, press the TAPE 2 button then press the DAT CONTROL button.
- **Even if the source is changed from the DAT deck to other equipment while the DAT deck is playing, the DAT deck will not stop operation. The opposite is also the case; when the source is changed from other equipment to the DAT deck, the other equipment will not stop operation.**
- **In order to assure proper operation, the buttons of the RM-SR777/RM-SR777S should be firmly pressed and its corresponding response confirmed.**

COMPU LINK
//// Remote ////
Control System

COMPU LINK REMOTE CONTROL SYSTEM

"COMPU LINK" Remote Control System is a system which has been originated and developed by JVC (Victor Company of Japan, Limited). The remote control units provided with your **COMPU LINK** remote control components employ this system. By operating the remote control unit in your hand, you can not only control each component of your **COMPU LINK** component but also enjoy such complicating performances as automatic source selection and synchronized recording without any difficulty. Please operate the JVC remote control unit yourself, and you will find how excellent this system is. The following are the brief explanations of its major performances.

1. Remote controlling of each component (Fig. 31)
- Functions corresponding to the following buttons can be generated by the remote control unit:

Cassette deck:	PLAY, STOP, MUSIC SCAN, FAST FORWARD, REWIND, PAUSE and RECORD
CD player:	PLAY, STOP, AUTO SEARCH, and TRACK NO. SELECT
CD auto changer:	PLAY MODE (CONTINUE, PROGRAM, MAGAZINE PROGRAM) and DISC NO. SELECT
Turntable:	START and STOP
Tuning control:	PRESET CHANNEL NO. SELECT

2. Automatic-source selection (Fig. 32)
If the attached remote cable is used to connect this unit to other JVC components with COMPU LINK-1/SYNCHRO terminals, sources can be switched with just one touch of this unit's source selector buttons and the corresponding component will start to play automatically. The source select button of the remote control unit or the corresponding component's PLAY button can also be used.

When switching from one component to another, such as a cassette deck, turntable or CD player, the previous component will stop playing after about five seconds.

3. Synchronized recording (Fig. 33)
Synchronized recording refers to the process whereby the cassette deck automatically starts recording in synchronization with the CD player or turntable.

Set the cassette deck to the REC/PAUSE mode following the procedure in its instruction manual. For synchronized recording from a CD player, push the PLAY button of the CD player. The cassette deck enters the record mode the moment the CD player starts and synchronized recording commences. Synchronized recording stops automatically when the CD player stops playing.

To cancel synchronized recording, push the STOP button of the CD player, turntable or cassette deck.

Notes:
- **When the REC/PAUSE mode is set by pushing PAUSE after depressing the REC and PLAY buttons simultaneously, synchronized recording is not possible. For details, refer to your cassette deck's instruction manual.**
- **You can program the order of recording tracks you wish to hear. For details, refer to the instruction book of the CD player.**
- **During synchronized recording, the blank gaps of about 4 seconds are automatically made between tunes. By utilizing these gaps, the music scanning is made possible.**
- **Abnormal operation will result if the power supply of any of the components is interrupted during synchronized recording. If this happens, push the component's PLAY button again to restart.**
- **Check that the COMPU LINK-1/SYNCHRO terminal of each component is connected with the remote cable provided. Be sure to read the instruction manual of each component carefully.**
- **Do not connect the remote cable when the cassette deck is connected to the TAPE 2 terminals.**
- **The source is locked to the CD or PHONO position during synchronized recording to avoid stopping or changing to another source accidentally. To change the source, you must first cancel synchronized recording.**
- **When performing synchronised recording from CD or PHONO to a DAT deck, the source selector will not be locked.**

TROUBLESHOOTING

What appears to be a malfunction may not always be serious.
Make sure first . . .

No sound and no illumination
Is the AC plug connected properly?

No sound from speakers
Are the speaker cords connected?
Are the SPEAKERS buttons pressed?

Sound from one speaker only
Are the speaker cords connected correctly? Is the BALANCE control set to one extreme or the other?

Continuous hiss or buzzing during FM reception
The incoming signal may be too weak.
Use the correct antenna.

Occasional crackling noise during FM reception.
This may be automobile ignition noise. Move antenna as far away from the road as possible.

Loud hum during record playing
Is the turntable grounded?
Try to change the cord path.

Howling during record playing
Is the turntable too close to a speaker?

Removal Procedures

Removing the Top Cover

1. Remove the four screws on both sides.
2. Remove the two screws located on the top of the rear panel.
3. Slightly open both sides of the top cover, to the left and right, and raise the rear panel. Then slowly lift it up and straight forward.

Removing the Front Panel

1. Remove the top cover.
2. Remove three plastic rivets on the upper part of the front panel and three screws from the lower part.
3. Remove the front panel.

Removing the SEA PCB (Fig. 1)

1. Remove the front panel.
2. Pull out seven SEA knobs.
3. Remove five screws Ⓐ securing the SEA PCB.

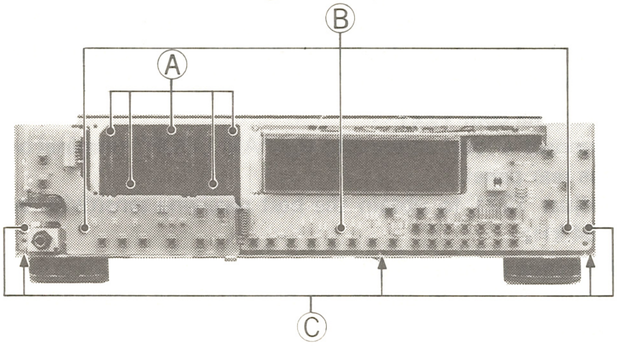


Fig. 1

Removing the Front Switch PCB

1. Remove the front panel.
2. Pull off three plastic rivets Ⓑ fixing the front switch PCB.
3. Lift up the front switch PCB and pull it off toward you from the connectors. (See Fig. 2.)

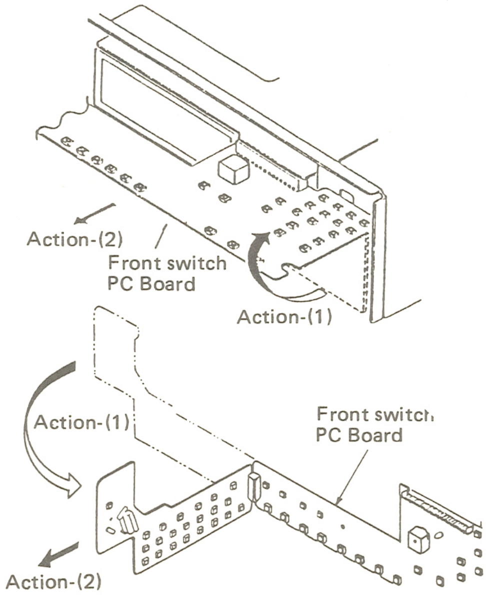


Fig. 2

Removing the LCD PCB (Fig. 1, 3)

1. Remove the front switch PCB.
2. Remove five screws Ⓒ securing the front bracket.
3. Remove two plastic rivets Ⓓ, and draw out the front bracket in little.
4. Remove four plastic rivets Ⓔ securing the LCD PCB.

Removing the Power Transistors

1. Remove the top cover.
2. Demount the bottom cover by removing 13 screws from the bottom.
3. Unsolder the power transistors.
4. Remove the screws holding the power transistors using a wrench having a diagonal length of 5.5 mm.

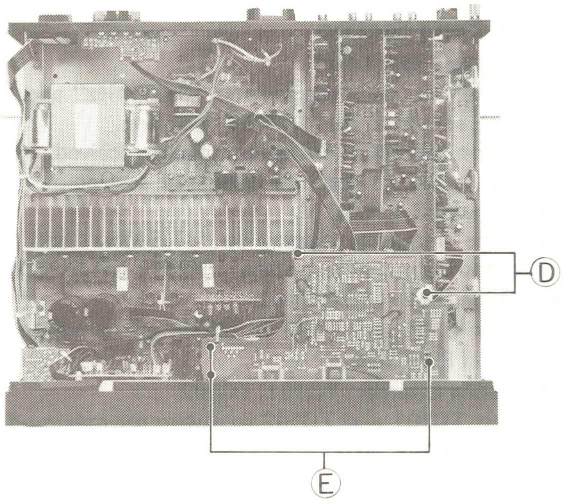
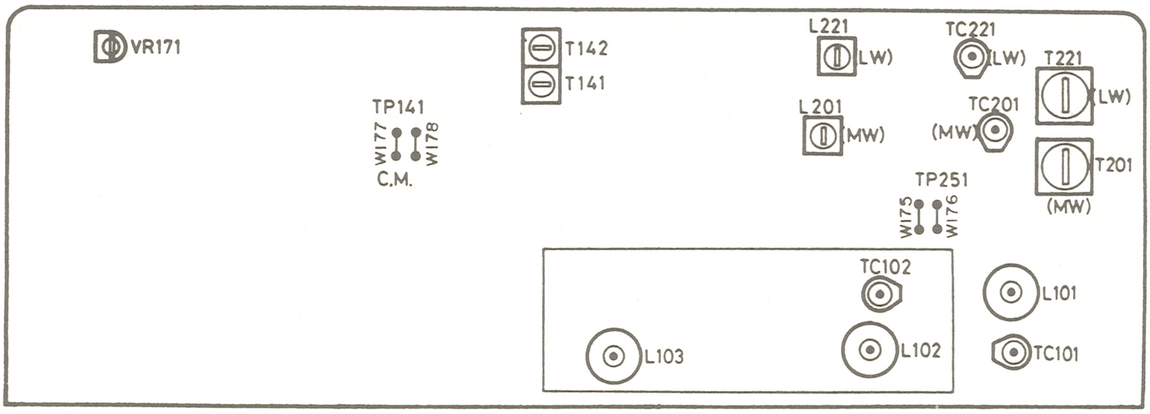


Fig. 3

FM/MW/LW Tuner Alignment Procedures



■ Front-end Section

FM oscillator coil: L103

1. Set the frequency display to "108.0 MHz" and the FM MODE switch to the "MONO" position.
2. Confirm the FM inter-station noise is received.
3. Adjust L103 so that the voltage of test point "TP251" becomes 8.3 V ± 0.1 V.
4. Set the frequency display to "87.5 MHz" and confirm that the output of test point "TP251" is 1.5~2.2 V.

FM antenna coil: L101, L102

5. Adjust L101 and L102 to obtain the maximum sensitivity at 89.9 MHz.

FM antenna trimmer: TC101, TC102

6. Adjust TC101 and TC102 to obtain the maximum sensitivity at 105.9 MHz.
7. Repeat the above adjustments of L101, L102, TC101 and TC102.

Note: After adjustment, confirm that the Band Cover is in the following range (for West Germany only).
Lower edge : 87.5 MHz (+0 Hz, −300 kHz)
Higher edge: 108.0 MHz (+500 Hz, −0 kHz)

■ IF Detection and MPX

FM detector coil: T131, T132

1. Connect a center-meter or a digital voltmeter to test point "TP141 (W177-W178)", and receive to 100.1 MHz signal in the condition of SSG ATT 70 dB.
2. Adjust T141 so that the center-meter indicates "0" or the digital voltmeter reads 0 ± 1.5 mV.
3. At the same time, adjust T142 so that the distortion is minimized.

Stereo Separation: VR171 (for Continental Europe, U.K. and Australia)

4. Tune in a 98.1 MHz stereo signal.
5. Adjust VR171 so that the channel separation becomes maximum.

■ LW Section

LW oscillator coil: L221

1. Set the frequency display to 144 kHz.
2. Adjust L221 to obtain 1.0 ± 0.1 V at test point "TP251".
3. Set the frequency display to 353 kHz and confirm that the voltage at test point "TP251" is 7.2 V ± 1.2 V.

LW antenna coil: T221

4. Connect a loop antenna to the "AM LOOP" terminal on the rear panel.
5. Adjust T221 to obtain the best receiving sensitivity on 164 kHz.

LW antenna trimmer: TC221

6. Adjust TC221 to obtain the best receiving sensitivity on 353 kHz.
7. Repeat the above adjustments of T221, TC221.

Note: After this alignment, confirm the MW section alignment.

■ MW Section

Note: (   ); 9 kHz step, [   ]; 10 kHz step

MW oscillator coil: L201

1. Set the frequency display, adjust L201 to obtain 522 kHz and confirm that the output of test point "TP251" is 1.1 V ± 0.1 V.
2. Set the frequency display to 1629 kHz and confirm that the output of test point "TP251" is 7.5 V ± 0.8 V.

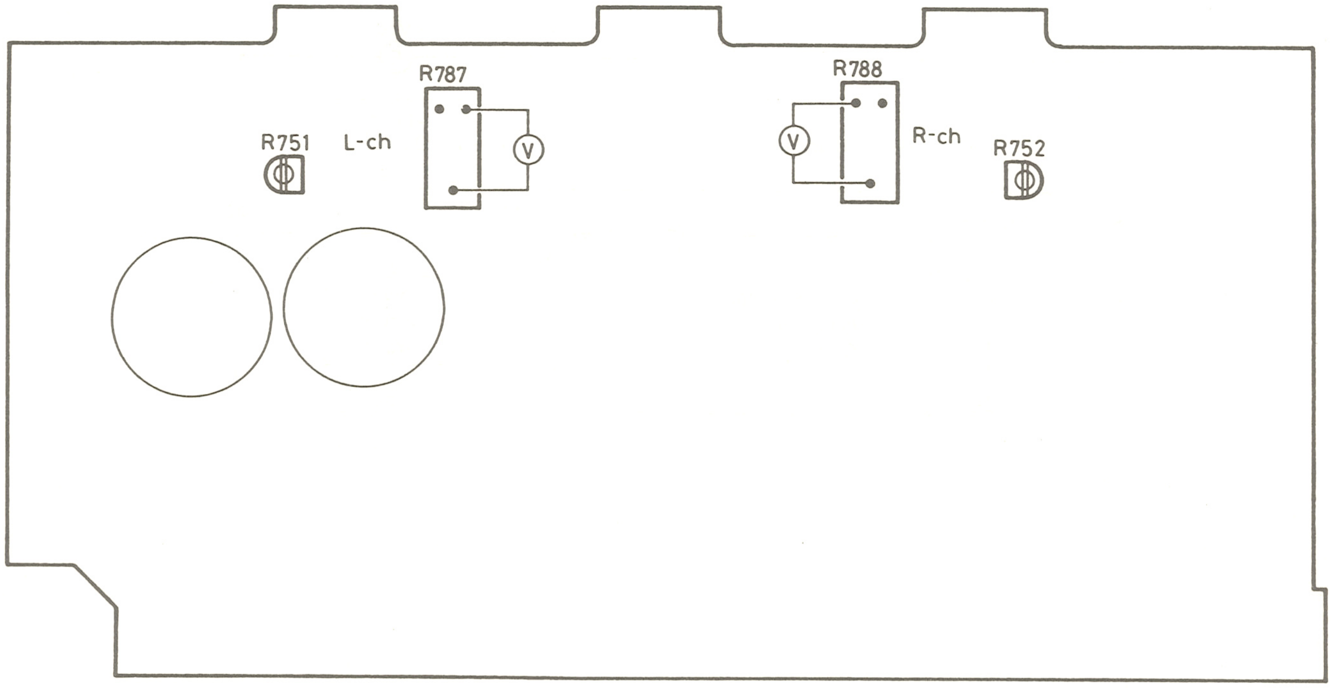
MW antenna coil: T201

3. Connect a loop antenna to the "AM LOOP" terminal on the rear panel.
4. Adjust T201 to obtain the best receiving sensitivity on 603 kHz.

MW antenna trimmer: TC201

5. Adjust TC201 to obtain the best receiving sensitivity on 1404 kHz.

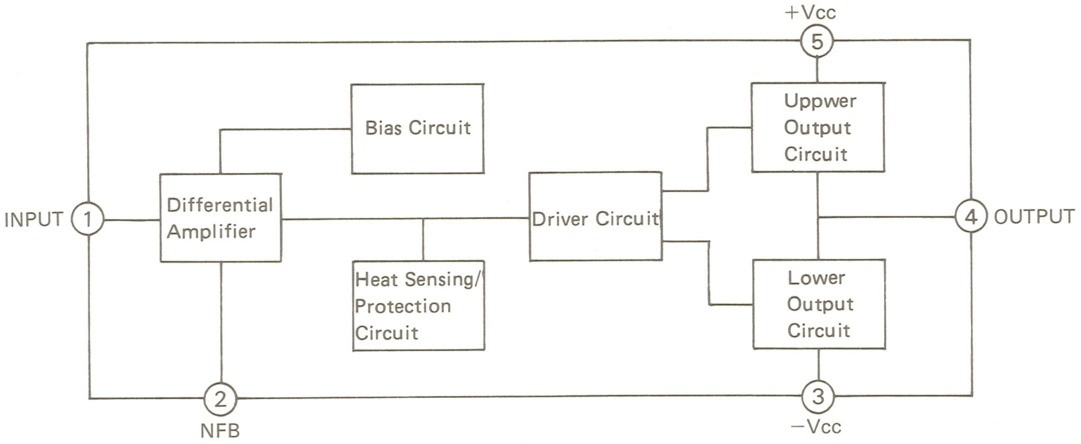
Power Amplifier Idling Current Adjustment



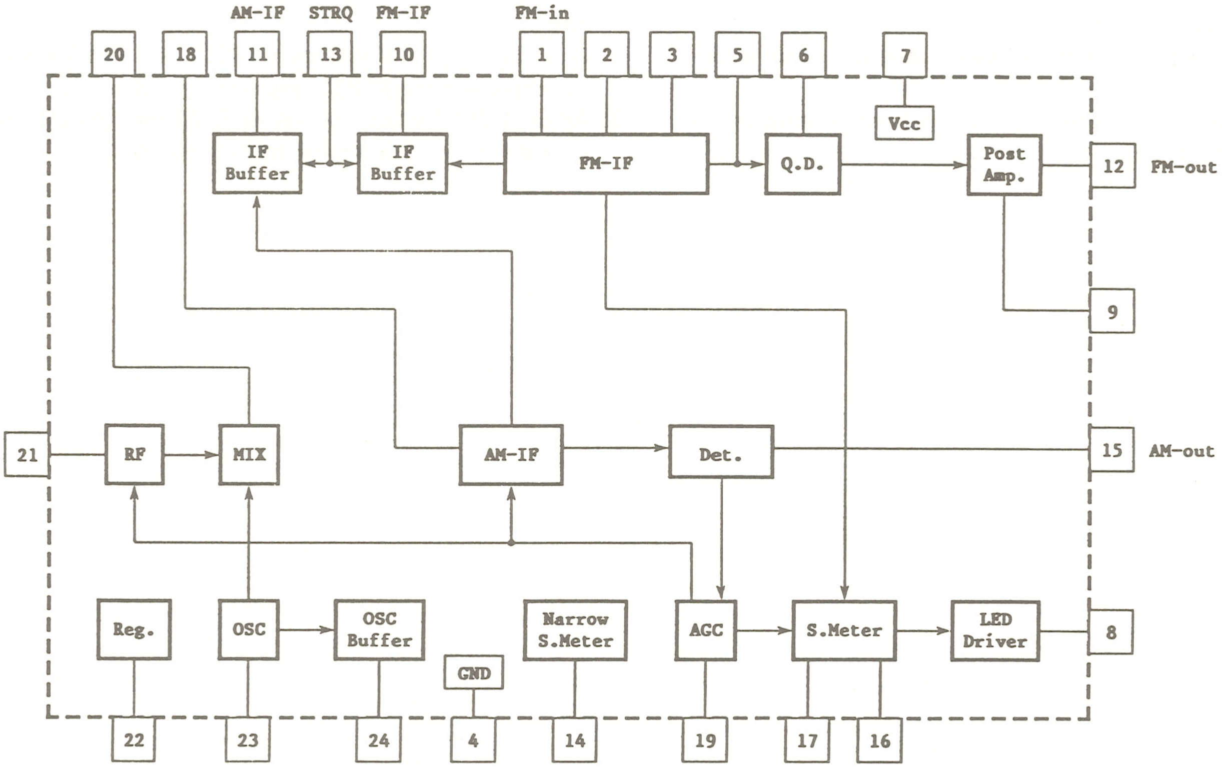
1. Turn R751 and R752 fully counterclockwise before the power switch "ON".
2. Allow the set warm up at least 5 minutes before adjustment.
3. Must keep the heat-sink to prevent overheating before adjustment.
4. Set the volume control to minimum during this adjustment.
5. Connect a digital voltmeter to R787 resistor's leads for left channel, or to R788's leads for right channel.
6. Adjust R751 for left channel, or R752 for right channel, so that the digital voltmeter reads 3~5 mV.

Internal Block Diagrams of ICs

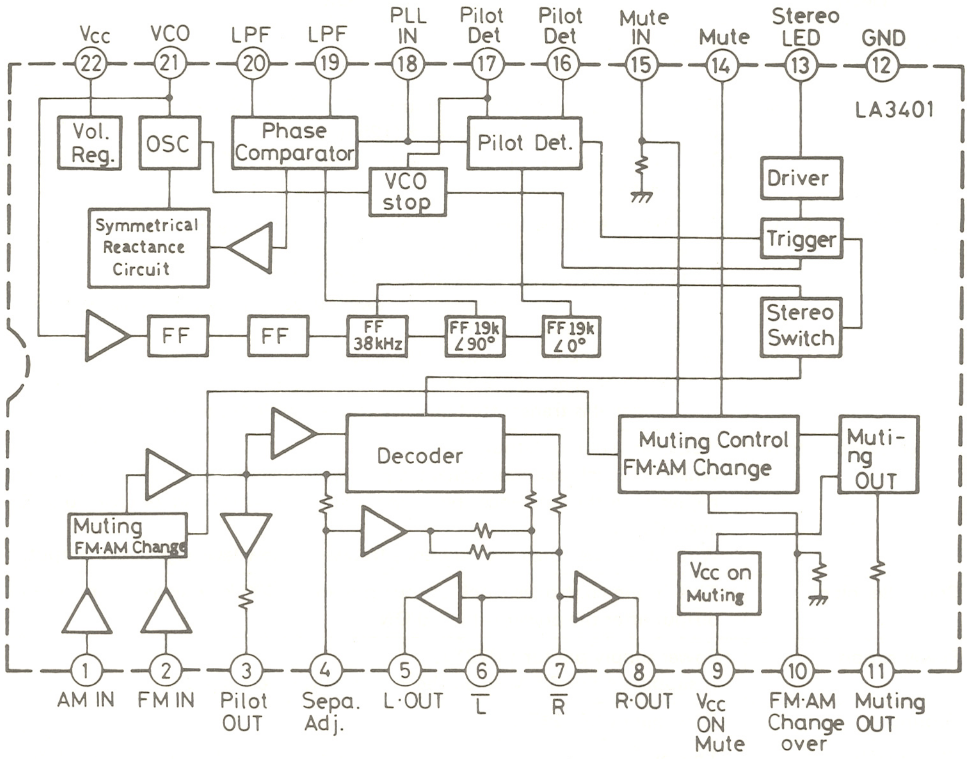
■ UPC1238V (IC011, IC012)


+Vcc
5
Bias Circuit
Uppwer Output Circuit
INPUT
1
Differential Amplifier
Driver Circuit
4
OUTPUT
Heat Sensing/ Protection Circuit
Lower Output Circuit
2
NFB
3
−Vcc

■ LA1266A (IC101)

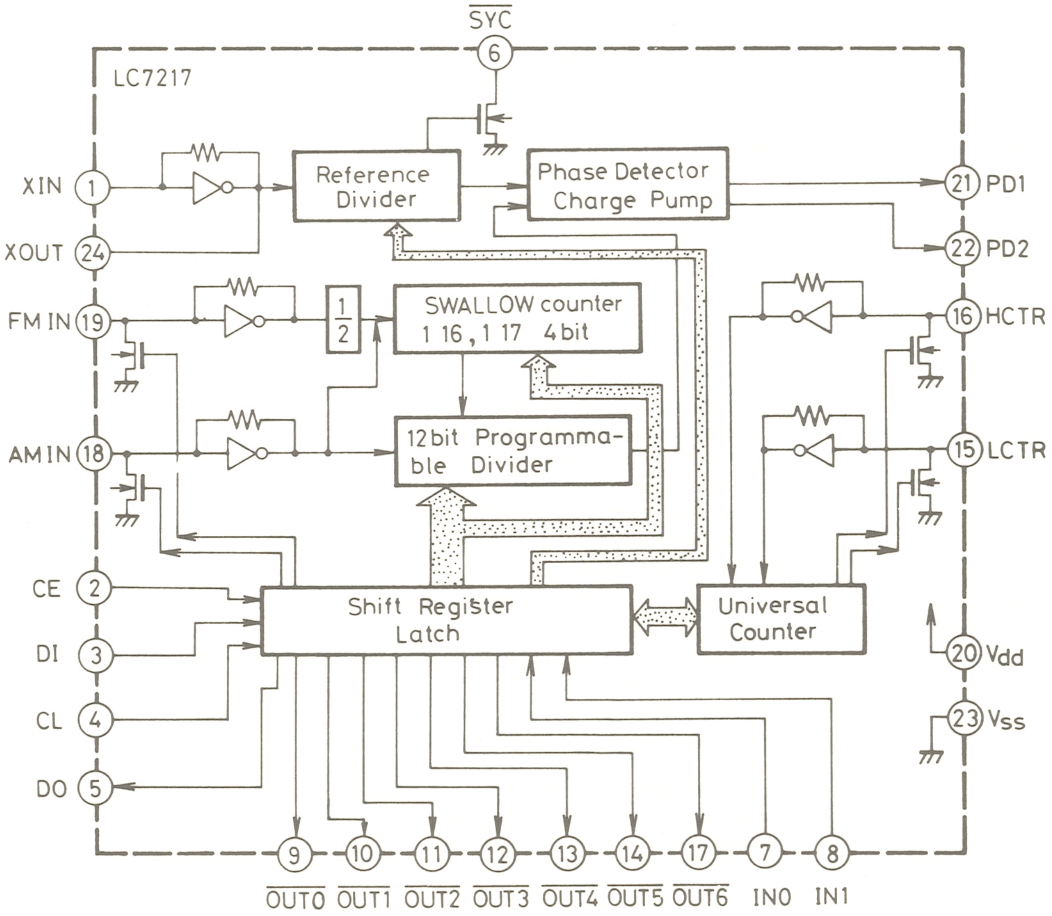

AM-IF
STRQ
FM-IF
FM-in
20
18
11
13
10
1
2
3
5
6
7
Vcc
IF Buffer
IF Buffer
FM-IF
Q.D.
Post Amp.
12
FM-out
9
21
RF
MIX
AM-IF
Det.
15
AM-out
Reg.
OSC
OSC Buffer
GND
Narrow S.Meter
AGC
S.Meter
LED Driver
8
22
23
24
4
14
19
17
16

■ LA3401 (IC171)


Vcc 22
VCO 21
LPF 20
LPF 19
PLL IN 18
Pilot Det 17
Pilot Det 16
Mute IN 15
Mute 14
Stereo LED 13
GND 12
LA3401
Vol. Reg.
OSC
Phase Comparator
Pilot Det.
VCO stop
Driver
Trigger
Symmetrical Reactance Circuit
FF
FF
FF 38kHz
FF 19k ∠90°
FF 19k ∠0°
Stereo Switch
Decoder
Muting Control FM·AM Change
Muti-ng OUT
Muting FM·AM Change
Vcc on Muting
1 AM IN
2 FM IN
3 Pilot OUT
4 Sepa. Adj.
5 L·OUT
6 $\overline{L}$
7 $\overline{R}$
8 R·OUT
9 Vcc ON Mute
10 FM·AM Change over
11 Muting OUT

■ LC7217 (IC251): PLL Synthesizer

(1) Internal Block Diagram


$\overline{\text{SYC}}$ 6
LC7217
XIN 1
XOUT 24
FM IN 19
AM IN 18
CE 2
DI 3
CL 4
DO 5
Reference Divider
Phase Detector Charge Pump
SWALLOW counter 1 16, 1 17 4bit
1/2
12bit Programmable Divider
Shift Register Latch
Universal Counter
21 PD1
22 PD2
16 HCTR
15 LCTR
20 Vdd
23 Vss
9 $\overline{\text{OUT0}}$
10 $\overline{\text{OUT1}}$
11 $\overline{\text{OUT2}}$
12 $\overline{\text{OUT3}}$
13 $\overline{\text{OUT4}}$
14 $\overline{\text{OUT5}}$
17 $\overline{\text{OUT6}}$
7 IN0
8 IN1

(2) Pin Functions

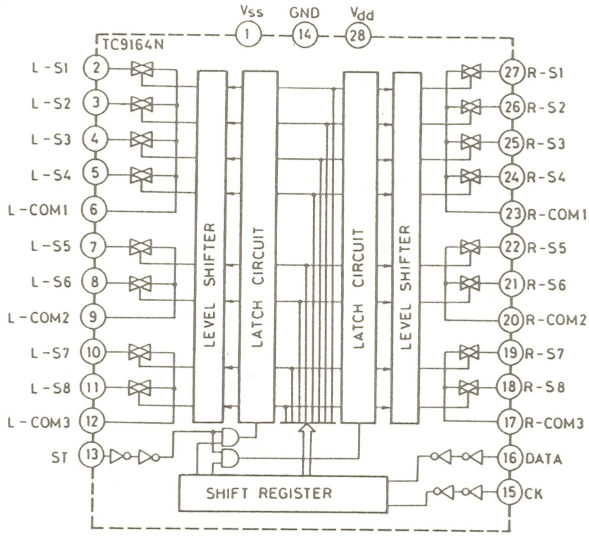
Symbol	Pin No.	Details	Function	I/O
X_{IN} X_{OUT}	1 24	X'tal OSC	• Crystal oscillator (7.2 MHz)	I O
FM IN	19	Local oscillator signal input	• FM IN is selected for serial data input: DV = 1 is assigned. • Input frequency is 10∼130 MHz (125 mVrms min.). • The signal passes through the built-in pre-scaler (1/2) and is transmitted to the swallow counter.	I

AM IN	18	Local oscillator signal input	• AM IN is selected for serial data input: DV = 0 is assigned.
			• When serial data is input: SP = 1 is assigned:
			  • Input frequency is 2∼40 MHz (125 mVrms min.).
			  • The signal is transmitted to the swallow counter without passing through the built-in pre-scaler (1/2).
			• When serial data is input: SP = 0 is assigned:
			  • Input frequency is 0.5∼10 MHz (125 mVrms min.).
			  • The signal is transmitted directly to the 12-bit programmable divider.
				I

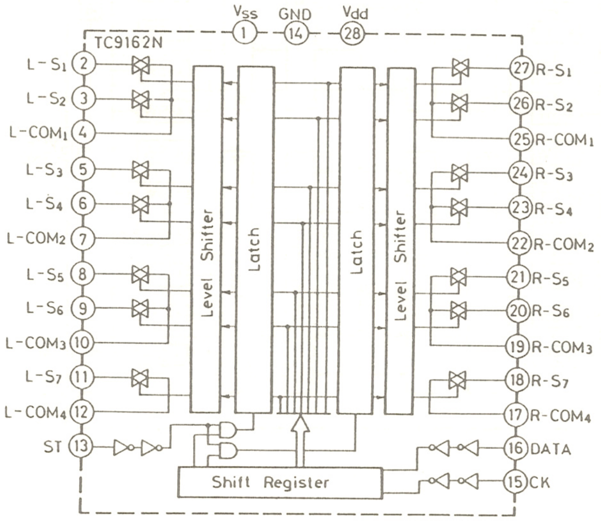
PD1 PD2	21 22	Charge pump output	• PLL charge pump output. • When the local oscillator signal frequency divided by N results in a frequency higher than the reference frequency, high level signals are output from PD1 and PD2. • When it is lower than the reference frequency, low level signals are output.	O
$\overline{\text{SYC}}$	6	Controller clock	• This is the controller clock output pin and a 400 kHz signal (duty 66%) is output after the power is turned ON.	O (N-ch open drain)
V_{DD}	20	Power supply	• Power supply pin for LC7217. It supplies 4.5∼6.5 V when the PLL circuit is activated.	–
V_{SS}	23	Ground	• GND pin of LC7217.	–
CE	2	Chip enable	• This pin goes high when serial data is input (DI) to LC7217 or output from it.	I
CL	4	Clock	• This clock is used to synchronize data when serial data is input (DI) to or output (DO) from LC7217.	I
DI	3	Input data	• Input pin for serial data which is transmitted from the controller to LC7217. • A total of 36 bits of data should be input for initialization.	I
DO	5	Output data	• Output pin for serial data transmitted from LC7217 to the controller. • A total of 24 bits can be output from the internal shift register in synchronized with CL.	O (N-ch open drain)
$\overline{\text{OUT 0}}$ $\overline{\text{OUT 1}}$ $\overline{\text{OUT 2}}$ $\overline{\text{OUT 3}}$ $\overline{\text{OUT 4}}$ $\overline{\text{OUT 5}}$ $\overline{\text{OUT 6}}$	9 10 11 12 13 14 17	Output port	• Latches O0∼O6 of the serial data transmitted from the controller, and inverts the data to output it in parallel. • $\overline{\text{OUT 0}}$ can output the time base for clock (8 Hz). (When TB = 1.) • $\overline{\text{OUT 1}}$ and $\overline{\text{OUT 2}}$ are complementary outputs. • $\overline{\text{OUT 0}}$, $\overline{\text{OUT 3}}$, $\overline{\text{OUT 4}}$, $\overline{\text{OUT 5}}$ and $\overline{\text{OUT 6}}$ are N-ch open drain outputs (up to 13 V).	O
IN 0 IN 1	7 8	Input port	• The data at input ports IN 0, IN 1 is converted from parallel to serial, and can be output from output pin DO.	I
HCTR	16	General purpose measurement signal input pin	• With serial data input: SC = 1, HCTR is selected. • The signal is transmitted to the general-purpose counter (20-bit binary counter) via a 1/8 divider internally. • For this, the value of the general-purpose counter becomes 1/8 of the actual frequency which is input to the HCTR pin. • The measured results can be output from the MSB of the general-purpose counter via output pin DO.	I

LCTR	15	General purpose counter frequency input pin	• With serial data input: SC = 0, LCTR is selected.
			• At this time, if serial data is input: SF = 1;
			  • The signal is transmitted directly to the general-purpose counter without passing through the internal 1/8 divider.
			• If serial data is input SF = 0:
			  • Input frequency is 1 Hz∼20 kHz (V_{IH} = 0.7 V_{DD} min., V_{IL} = 0.3 V_{DD} max.).
			  • The measurement periods of 1-cycle and 2-cycle can be selected; when 2-cycle is selected, the input frequency is 2 Hz∼20 kHz. (GT = 1/0 : 2/1 period)
				I

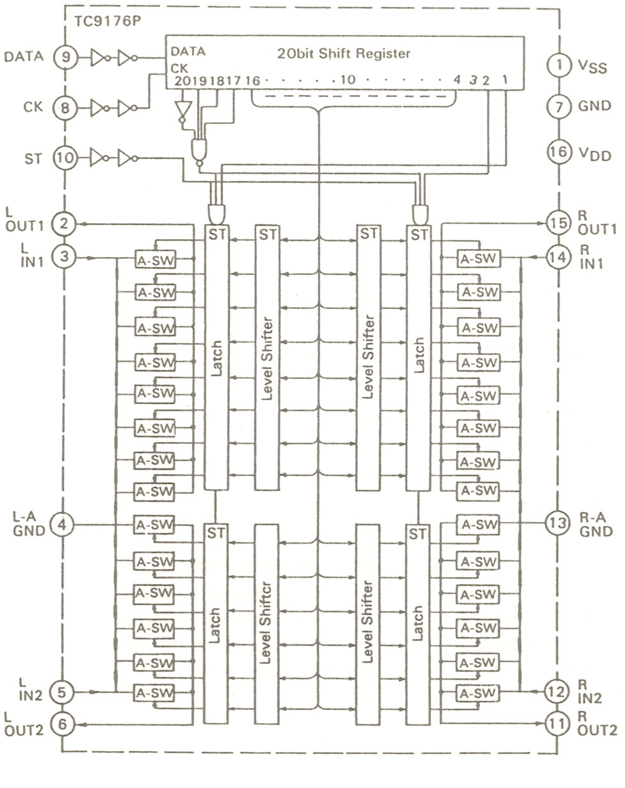
■ TC9164N (IC302)


Vss
GND
Vdd
1
14
28
TC9164N
L-S1 2
L-S2 3
L-S3 4
L-S4 5
L-COM1 6
L-S5 7
L-S6 8
L-COM2 9
L-S7 10
L-S8 11
L-COM3 12
ST 13
LEVEL SHIFTER
LATCH CIRCUIT
LATCH CIRCUIT
LEVEL SHIFTER
SHIFT REGISTER
27 R-S1
26 R-S2
25 R-S3
24 R-S4
23 R-COM1
22 R-S5
21 R-S6
20 R-COM2
19 R-S7
18 R-S8
17 R-COM3
16 DATA
15 CK

■ TC9162N (IC391)

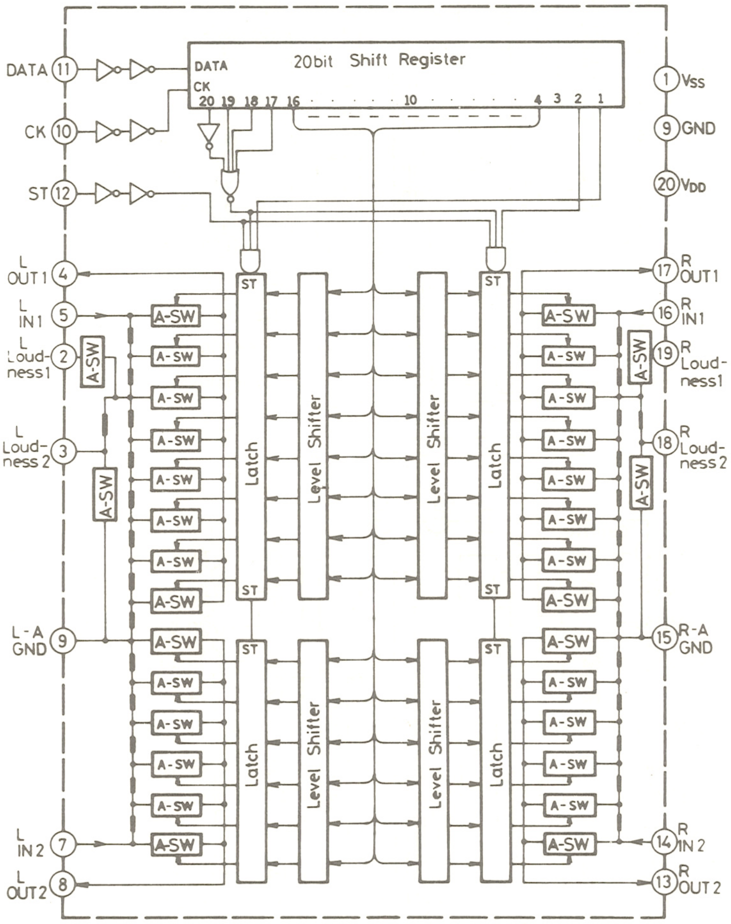

Vss
GND
Vdd
1
14
28
TC9162N
L-S1 2
L-S2 3
L-COM1 4
L-S3 5
L-S4 6
L-COM2 7
L-S5 8
L-S6 9
L-COM3 10
L-S7 11
L-COM4 12
ST 13
Level Shifter
Latch
Latch
Level Shifter
Shift Register
27 R-S1
26 R-S2
25 R-COM1
24 R-S3
23 R-S4
22 R-COM2
21 R-S5
20 R-S6
19 R-COM3
18 R-S7
17 R-COM4
16 DATA
15 CK

■ TC9176P (IC373)


TC9176P
DATA 9
CK 8
ST 10
DATA
CK
20bit Shift Register
20 19 18 17 16 · · · · · 10 · · · · · · 4 3 2 1
1 VSS
7 GND
16 VDD
L OUT1 2
L IN1 3
L-A GND 4
L IN2 5
L OUT2 6
A-SW
ST
Latch
Level Shifter
15 R OUT1
14 R IN1
13 R-A GND
12 R IN2
11 R OUT2

■ TC9177P (IC371)

(1) Block Diagram

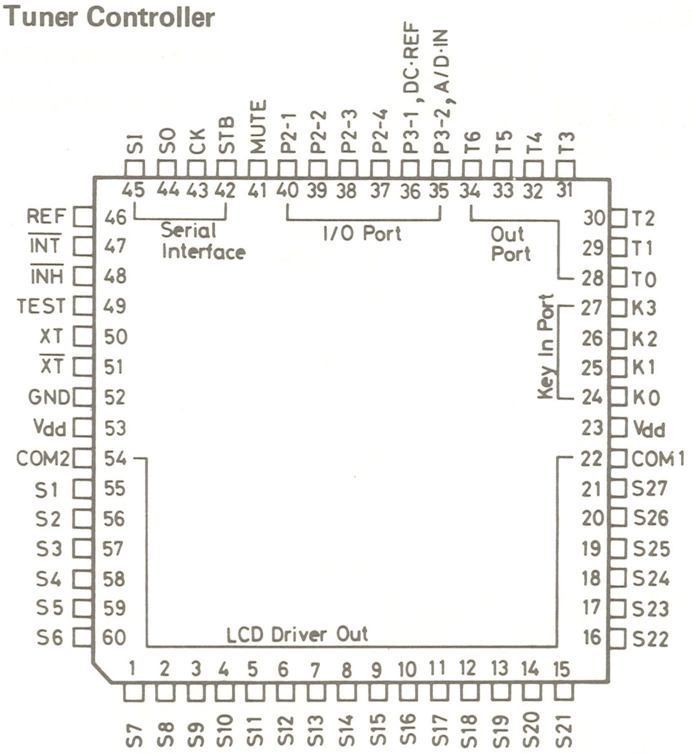

DATA 11
CK 10
ST 12
DATA
CK
20bit Shift Register
20 19 18 17 16 10 4 3 2 1
1 Vss
9 GND
20 VDD
L OUT 1 4
L IN 1 5
L Loud-ness1 2
L Loud-ness 2 3
L-A GND 9
L IN 2 7
L OUT2 8
R OUT 1 17
R IN 1 16
R Loud-ness1 19
R Loud-ness 2 18
R-A GND 15
R IN 2 14
R OUT 2 13
A-SW
ST
Latch
Level Shifter

(2) Pin Functions

Pin No.	Symbol	Function
1	Vss	(–) Power Supply
2	L - Loudness 1	Terminal for Loudness (L-ch)
3	L - Loudness 2	Terminal for Loudness (L-ch)
4	L - OUT 1	10 dB Step Attenuator Output
5	L - IN 1	10 dB Attenuator Input
6	A - GND	Ground (Power Supply)
7	L - IN 2	2 dB Attenuator Input
8	L - OUT 2	2 dB Step Attenuator Output
9	GND	Ground (Signal)
10	CK	Clock Input
11	DATA	Data Input
12	ST	Strobe Input
13	R - OUT 2	2 dB Step Attenuator Output
14	R - IN 2	2 dB Attenuator Input
15	A - GND	Ground (Power Supply)
16	R - IN 1	10 dB Attenuator Input
17	R - OUT 1	10 dB Step Attenuator Output
18	R - Loudness 2	Terminal for Loudness (R-ch)
19	R - Loudness 1	Terminal for Loudness (R-ch)
20	VDD	(+) Power Supply

■ TC9306F-028BS (IC421): Tuner Controller

(1) External Diagram

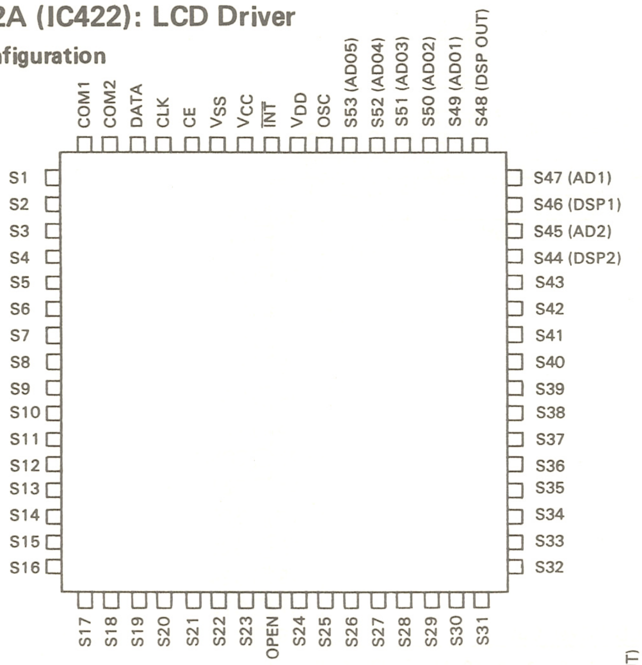

SI
SO
CK
STB
MUTE
P2-1
P2-2
P2-3
P2-4
P3-1, DC·REF
P3-2, A/D·IN
T6
T5
T4
T3
45 44 43 42 41 40 39 38 37 36 35 34 33 32 31
Serial Interface
I/O Port
Out Port
REF 46
$\overline{\text{INT}}$ 47
$\overline{\text{INH}}$ 48
TEST 49
XT 50
$\overline{\text{XT}}$ 51
GND 52
Vdd 53
COM2 54
S1 55
S2 56
S3 57
S4 58
S5 59
S6 60
30 T2
29 T1
28 T0
27 K3
26 K2
25 K1
24 K0
Key In Port
23 Vdd
22 COM1
21 S27
20 S26
19 S25
18 S24
17 S23
16 S22
LCD Driver Out
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15
S7 S8 S9 S10 S11 S12 S13 S14 S15 S16 S17 S18 S19 S20 S21

(2) Pin functions

Pin No.	Symbol	Name	I/O	Terminal Function
55～60 1～21	SEG.1 ～SEG.27	Segment 1 ～Segment 27	O	Drive the LCD segment.
22	COM 1	Common 1	O	Drive the common 1 of the LCD.
54	COM 2	Common 2	O	Drive the common 2 of the LCD.
24	K0	Key in 0	I	Key input
25	K1	Key in 1	I	Key input
26	K2	Key in 2	I	Key input
27	K3	Key in 3	I	Key input
28	T0	Key out 0	O	Key output
29	T1	Key out 1	O	Key output
30	T2	Key out 2	O	Key output
31	T3	Key out 3	O	Key output
32	T4	Key out 4	O	Key output
33	T5	Key out 5	O	Key output
34	T6	Key out 6	O	Key output
35	A/D IN	A/D input or TUNED input	I	Input for signal meter or input for TUNED indicator
36	DC REF	DC reference	I	Reference voltage for A/D
37	P2-4	Key out 7	O	Key output
38	P2-3	DCS IN	I	Input for Direct Call System
39	P2-2	DCS OUT	O	Output for Direct Call System
40	P2-1	STEREO IN	I	Input for stereo indicator
41	MUTE	MUTE	O	"H" output when muting is turned ON.
42	STB	STB	O	Serial Data Bus (Connect to LC7217.)
43	CK	CK	O	Serial Data Bus (Connect to LC7217.)
44	SO	SO	O	Serial Data Bus (Connect to LC7217.)
45	SI	SI	I	Serial Data Bus (Connect to LC7217.)
46	REF	REF	O	Output for PLL reference frequency
47	$\overline{\text{INT}}$	$\overline{\text{INT}}$	I	Initialized at "L" level.
48	$\overline{\text{INH}}$	$\overline{\text{INH}}$	I	State of inhibit at "L" level
49	TEST	TEST	—	Terminal of crystal oscillator (7.2 MHz)
50	XT	XT	—	Terminal of crystal oscillator (7.2 MHz)
51	$\overline{\text{XT}}$	$\overline{\text{XT}}$	—	Terminal of crystal oscillator (7.2 MHz)
52	GND	GND	—	Ground
23, 53	VDD	VDD	—	+5 V (Connecting inside)

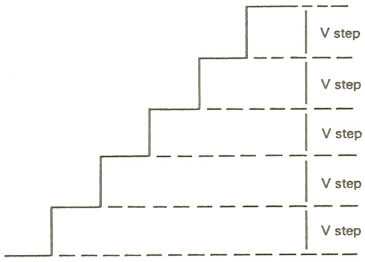
■ LC7582A (IC422): LCD Driver

(1) Pin Configuration

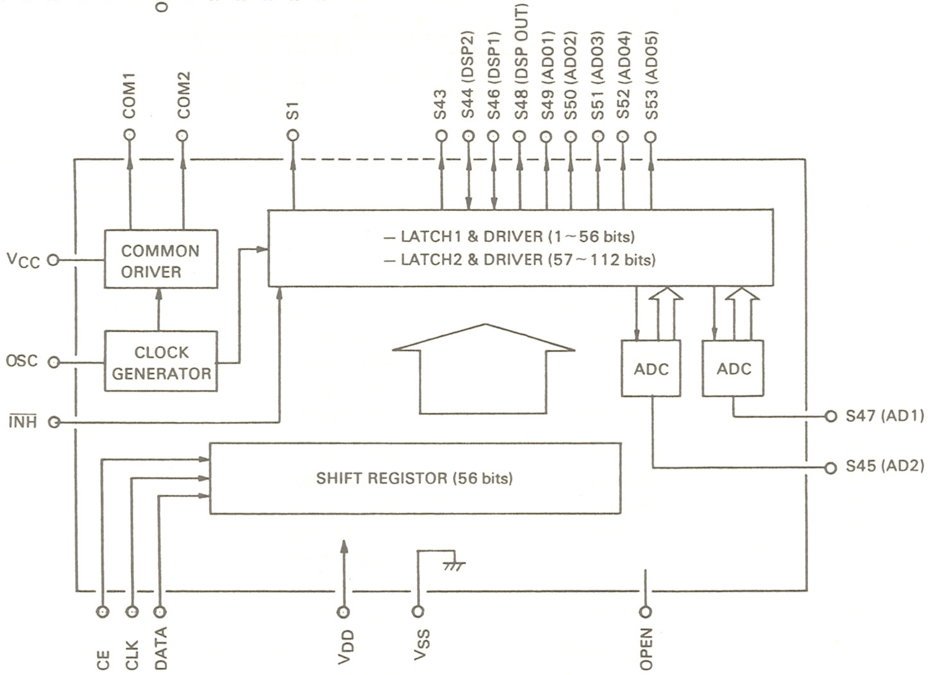

COM1
COM2
DATA
CLK
CE
VSS
VCC
INT
VDD
OSC
S53 (AD05)
S52 (AD04)
S51 (AD03)
S50 (AD02)
S49 (AD01)
S48 (DSP OUT)
S1
S2
S3
S4
S5
S6
S7
S8
S9
S10
S11
S12
S13
S14
S15
S16
S47 (AD1)
S46 (DSP1)
S45 (AD2)
S44 (DSP2)
S43
S42
S41
S40
S39
S38
S37
S36
S35
S34
S33
S32
S17
S18
S19
S20
S21
S22
S23
OPEN
S24
S25
S26
S27
S28
S29
S30
S31

(2) Step Voltage Differential

Input voltage of S45 (AD2) and S47 (AD1)


V step
V step
V step
V step
V step

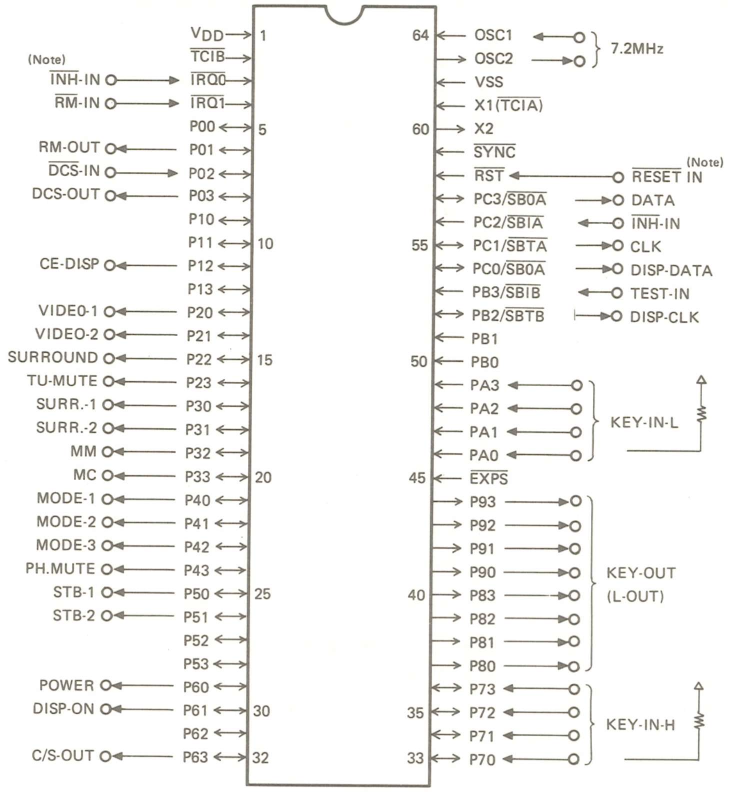
(3) Block Diagram


COM1
COM2
S1
S43
S44 (DSP2)
S46 (DSP1)
S48 (DSP OUT)
S49 (AD01)
S50 (AD02)
S51 (AD03)
S52 (AD04)
S53 (AD05)
VCC
COMMON ORIVER
— LATCH1 & DRIVER (1 ~ 56 bits)
— LATCH2 & DRIVER (57 ~ 112 bits)
OSC
CLOCK GENERATOR
ADC
ADC
INH
S47 (AD1)
S45 (AD2)
SHIFT REGISTOR (56 bits)
CE
CLK
DATA
VDD
VSS
OPEN

(4) Terminal Description

• S1 ~ S43	:	Segment output terminals
• S46 (DSP1), S44 (SDP2)	:	Segment output or DSP input terminals
• S47 (AD1), S45 (AD2)	:	Segment output or AD input terminals
• S48 (DSP OUT)	:	Segment output or ADS output terminal
• S49 ~ S53 (AD0 ~ 5)	:	Segment output or AD output terminals
• COM1, 2	:	Common output terminals (Only COM1 is used at the time of 1/1 duty, at which time COM2 is open.)
• OSC	:	Oscillator terminal
• CE, CLK, DATA	:	Input terminals for serial data transmission
• V_{DD}, Vcc	:	Power supply terminal
• $\overline{\text{INH}}$	:	Input terminal for extinguishing and lighting the display (Effective only for the output driver. Therefore, serial data can be sent during extinguishing and lighting.)
• OPEN	:	Unconnected

■ MN17581JSL1 (IC441): System Controller


VDD 1
TCIB
(Note)
INH-IN IRQ0
RM-IN IRQ1
P00 5
RM-OUT P01
DCS-IN P02
DCS-OUT P03
P10
P11 10
CE-DISP P12
P13
VIDEO-1 P20
VIDEO-2 P21
SURROUND P22 15
TU-MUTE P23
SURR.-1 P30
SURR.-2 P31
MM P32
MC P33 20
MODE-1 P40
MODE-2 P41
MODE-3 P42
PH.MUTE P43
STB-1 P50 25
STB-2 P51
P52
P53
POWER P60
DISP-ON P61 30
P62
C/S-OUT P63 32
64 OSC1
OSC2
7.2MHz
VSS
X1(TCIA)
60 X2
SYNC
RST RESET IN (Note)
PC3/SB0A DATA
PC2/SBIA INH-IN
55 PC1/SBTA CLK
PC0/SB0A DISP-DATA
PB3/SBIB TEST-IN
PB2/SBTB DISP-CLK
PB1
50 PB0
PA3
PA2
PA1
PA0
KEY-IN-L
45 EXPS
P93
P92
P91
P90
40 P83
P82
P81
P80
KEY-OUT (L-OUT)
P73
35 P72
P71
33 P70
KEY-IN-H

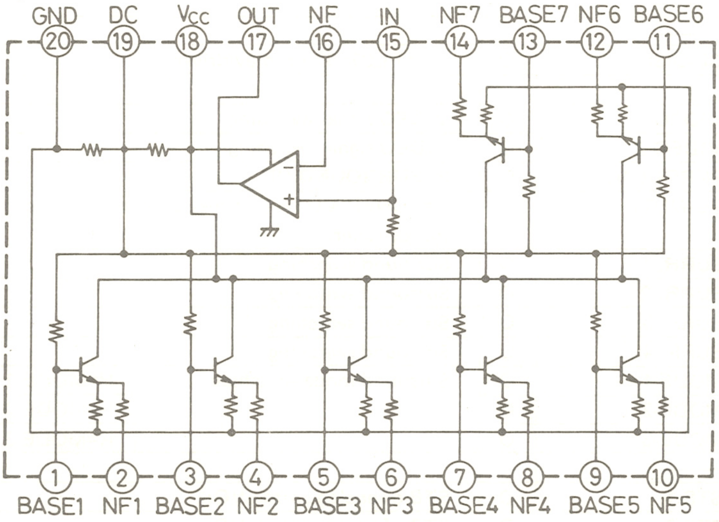
Note: TRQO and PC2/SBIA may be connected and used.

(2) Pin Functions

Pin No.	Port	Input/Output Name	I/O	Function		Off	Back-up
1	V_{DD}	———	I	5V			
2	TCIB	———	I	GND			
3	IRQ0	INH-IN	I	L=AC off; enters back up mode			
4	IRQ1	RM-IN	I	Remote control input			
5	P00	———				L	L
6	P01	RM-OUT	O	Remote control IND, ON		L	L
7	P02	DCS-IN	I	DCS input, Input at negative logic		L	L
8	P03	DCS-OUT	O	DCS output		L	L
9	P10	———					
10	P11	———					
11	P12	CE-DISP	O	CE of LC7582 (display driver)		L	L
12	P13						
13	P20	VIDEO-1	O	VIDEO signal switching		L	L
14	P21	VIDEO-2	O	VIDEO signal switching		L	L
15	P22	SURROUND	O	H=SURROUND ON		L	L
16	P23	TU-MUTE	O	H=TUNER MUTE (at times other than that of the source tuner)		L	L
17	P30	SURR. 1	O	Surround switching		L	L
18	P31	SURR. 2	O	Surround switching		L	L
19	P32	SURR. 3	O	Surround switching		L	L
20	P33	SURR. 4	O	Surround switching		L	L
21	P40	MODE-1	O	Surround mode switching	H=MODE 1	L	L
22	P41	MODE-2	O		H=MODE 2	L	L
23	P42	MODE-3	O		H=MODE 3	L	L
24	P43	———					
25	P50	STB-1	O	STB of analog switch VOL.		L	L
26	P51	STB-2	O	STB of analog switch VOL.		L	L
27	P52	———					
28	P53	———	O			L	L
29	P60	POWER	O	H=AC (POWER) ON		L	L

Pin No.	Port	Input/Output Name	I/O	Function	Off	Back-up
30	P61	DISP-ON	O	H=display on (INH of the TUBER and LC7582)	L	L
31	P62	———				
32	P63	C/S-OUT	O	Chip select output, L output	L	L
33	P70	KEY-IN-H	I	KEY input, L take-in		L
34	P71	KEY-IN-H	I	KEY input, L take-in		L
35	P72	KEY-IN-H	I	KEY input, L take-in		L
36	P73	KEY-IN-H	I	KEY input, L take-in		L
37	P80	KEY-OUT	O	KEY output, L output		L
38	P81	KEY-OUT	O	KEY output, L output		L
39	P82	KEY-OUT	O	KEY output, L output		L
40	P83	KEY-OUT	O	KEY output, L output		L
41	P90	KEY-OUT	O	KEY output, L output		L
42	P91	KEY-OUT	O	KEY output, L output		L
43	P92	KEY-OUT	O	KEY output, L output		L
44	P93	KEY-OUT	O	KEY output, L output		L
45	EXPS	———	I	OPEN	–	–
46	PAO	KEY-IN-L	I	KEY input, L take-in		
47	PAI	KEY-IN-L	I	KEY input, L take-in		
48	PA2	KEY-IN-L	I	KEY input, L take-in		
49	PA3	KEY-IN-L	I	KEY input, L take-in		
50	PB0	———			L	L
51	PB1	———				
52	PB2/$\overline{\text{SBTB}}$	DISP-CLK	O	S-CLK of LC7582 and C.C.S.	L	L
53	PB3/$\overline{\text{SBIB}}$	TEST-IN	I	H=TEST MODE	L	L
54	PCO/$\overline{\text{SBOB}}$	DISP-DATA	O	S-DATA of LC7582 and C.C.S.	L	L
55	PC1/$\overline{\text{SBTA}}$	DISP-CLK	O	S-CLK of analog switch, VOL.	L	L
56	PC2/$\overline{\text{SBIA}}$	$\overline{\text{INH}}$-IN	I	L=AC off; enters back-up mode	–	–
57	PC3/$\overline{\text{SBOA}}$	INH-DATA	O	S-DATA of analog switch, VOL.	L	L
58	$\overline{\text{RST}}$	$\overline{\text{RESET}}$	I	$\overline{\text{RESET}}$ input		
59	$\overline{\text{SYNC}}$	———	O	OPEN		
60	X2($\overline{\text{TCIA}}$)	———	I	OPEN		
61	X1	———	O	Pull up		
62	V_{SS}	———	I	GND		
63	OSC2	———	O	7.2 MHz RESONATOR		
64	OSC1	———	I	7.2 MHz RESONATOR		

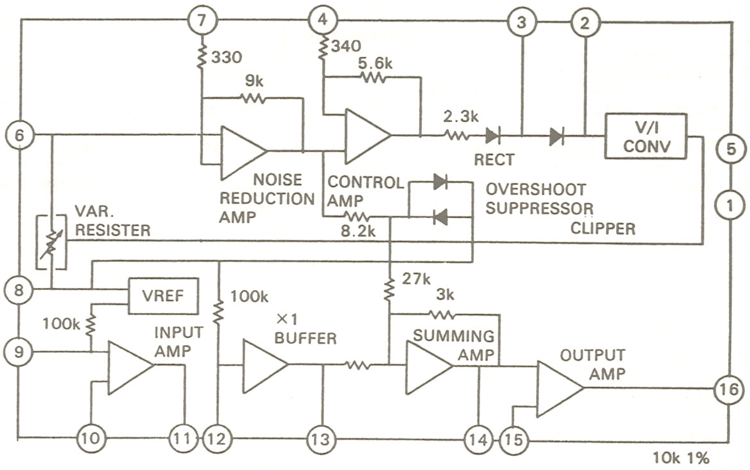
■ LA3607S (IC501, IC502)



■ LA2730 (IC681): Dolby "B" Noise Reduction

LA2730

Function	Pin	Pin	Function
GND	1	16	OUTPUT AMP OUT
RECT. FILTER	2	15	OUTPUT AMP GAIN
RECT. FILTER	3	14	SUMMING AMP OUT
CONTROL GAIN	4	13	BUFFER OUT
V+	5	12	BUFFER IN
NOISE RED IN	6	11	INPUT AMP OUT
N. RAMP DECOUPLE	7	10	INPUT AMP GAIN
REF	8	9	INPUT AMP IN

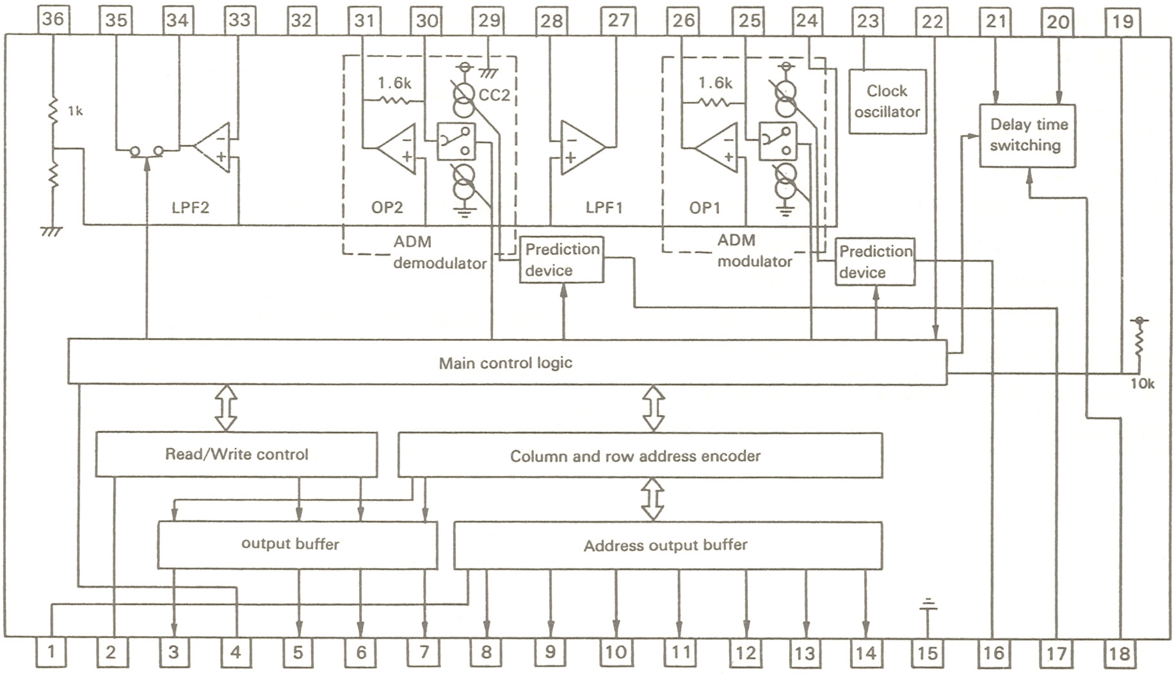

7
4
3
2
330
340
5.6k
9k
2.3k
6
NOISE REDUCTION AMP
CONTROL AMP
RECT
V/I CONV
5
OVERSHOOT SUPPRESSOR
CLIPPER
1
VAR. RESISTER
8.2k
8
VREF
100k
27k
3k
×1 BUFFER
100k
9
INPUT AMP
SUMMING AMP
OUTPUT AMP
16
10
11
12
13
14
15
10k 1%

■ M50199P (IC661): Digital Delay

(1) Pin Connection Diagram (Top View)

M50199P

Function	Pin	Pin	Function
Address 6 output	1	36	Power supply
Memory data input	2	35	Low-pass filter 2 output 2
Column address strobe output	3	34	Low-pass filter 2 output 1
Reset input	4	33	Low-pass filter 2 input
Data output	5	32	No connection
Write control output	6	31	OP amp. output
Row address strobe output	7	30	OP amp. 2 input
Address 0 output	8	29	Analog GND
Address 2 output	9	28	Low-pass filter 1 input
Address 1 output	10	27	Low-pass filter 1 output
Address 7 output	11	26	OP amp. 1 output
Address 5 output	12	25	OP amp. 1 input
Address 4 output	13	24	Reference
Address 3 output	14	23	Oscillator input
Digital GND	15	22	Oscillator output
Current control 1	16	21	Long
Current control 2	17	20	Middle
Short	18	19	Comparator data input

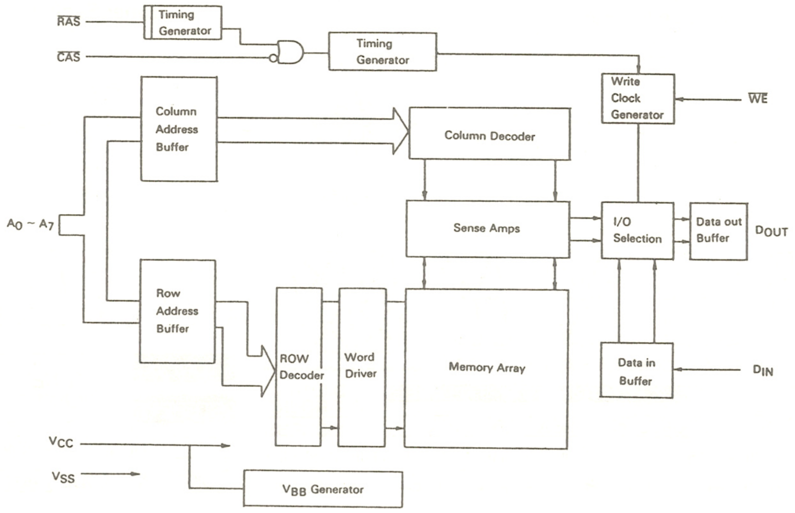

36
35
34
33
32
31
30
29
28
27
26
25
24
23
22
21
20
19
1k
1.6k
CC2
LPF2
OP2
ADM demodulator
Prediction device
LPF1
1.6k
OP1
ADM modulator
Prediction device
Clock oscillator
Delay time switching
10k
Main control logic
Read/Write control
Column and row address encoder
output buffer
Address output buffer
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18

(2) Pin Name

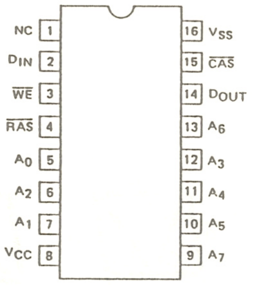
Pin No.	Name	Name Abbreviated	Method of Use	Standard Output Voltage
1	Address 6 output	A6	Connect to A6 (Address input 6) of the memory.	5 Vpo
2	Memory data input	MDI	Connect to 0 (Data output) of the memory.	–
3	Row address strobe output	CAS	Connect to CAS (Column Address Strobe input) of the memory.	5 Vpo
4	Reset input	RESET	Reset at L level; the reset is applied by externally connected C and R when the power is switched on.	–
5	Data output	DO	Connected to D (Data input) of the memory	5 Vpo
6	Write control output	W	Connect to W (Write control input) of the memory.	5 Vpo
7	Row address strobe output	RAS	Connect to RAS (Row Address Strobe input) of the memory.	5 Vpo
8	Address 0 output	A0	Connect to A0 of the memory.	5 Vpo
9	Address 2 output	A2	Connect to A2 of the memory.	5 Vpo
10	Address 1 output	A1	Connect to A1 of the memory.	5 Vpo
11	Address 7 output	A7	Connect to A7 of the memory.	5 Vpo
12	Address 5 output	A5	Connect to A5 of the memory.	5 Vpo
13	Address 4 output	A4	Connect to A4 of the memory.	5 Vpo
14	Address 3 output	A3	Connect to A3 of the memory.	5 Vpo
15	Digital GND	D-GND	Ground at one point with the analog GND.	5 Vpo
16	Current control 1	CC1		0 V
17	Current control 2	CC2		0.7 V (When there is no signal)
18	Short	SHORT	At H level, the delay time is Td = 12.5 ms and the output current for the indicator is 5 mA typ.	5 V (at S), 0 V (at M and L)
19	Comparator data input	CDI	Connect to the output of the comparator.	–
20	Middle	MIDD	At H level, Td = 18.8 ms and the output current for the indicator is 5 mA typ.	5 V (at M), 0 V (at S and L)
21	Long	LONG	At H level, Td = 25 ms and the output current for the indicator is 5 mA typ.	5 V (at L), 0 V (at S and M)
22	Oscillator output	OSC OUT	Connect a 4 MHz ceramic filter; leave open when using an external clock.	5 Vp-o
23	Oscillator input	OSC IN	Connect the 4 MHz ceramic filter or input an external clock.	–
24	Reference	REF	1/2 Vcc	–2.5 V
25	OP amp. 1 input	OP 1 IN	Form a mirror integrator an external C.	2.5 V
26	OP amp. 1 output	OP 1 OUT		2.5 V
27	Low-pass filter 1 output	LPF 1 OUT	Form a secondary low-pass filter with an external C and R.	2.5 V
28	Low-pass filter 1 input	LPF1 IN		2.5 V
29	Analog GND	A-GND		0 V
30	OP amp. 2 input	OP 2 IN	Form a mirror integrator with an external C.	2.5 V
31	OP amp. 2 output	OP 2 OUT		2.5 V
32	No connection	NC		–
33	Low-pass filter 2 input	LPF2 IN	Form a secondary low-pass filter with an external C and R.	2.5 V
34	Low-pass filter 2 output 1	LPF2 OUT 1		2.5 V
35	Low-pass filter 2 output 2	LPF2 OUT 2		2.5 V
36	Power supply	Vcc	Apply 4 to 5.5 V (rating 5 V).	–

■ MSM3764A-12RS (IC663): Dynamic RAM

(1) Circuit Structure

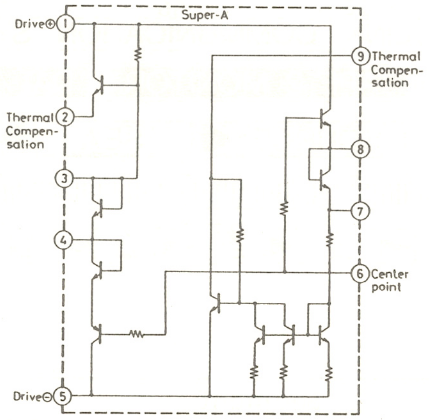

RAS
CAS
Timing Generator
Timing Generator
Write Clock Generator
WE
Column Address Buffer
Column Decoder
A0 ~ A7
Sense Amps
I/O Selection
Data out Buffer
DOUT
Row Address Buffer
ROW Decoder
Word Driver
Memory Array
Data in Buffer
DIN
Vcc
Vss
VBB Generator

(2) Terminal Connections (Top View)

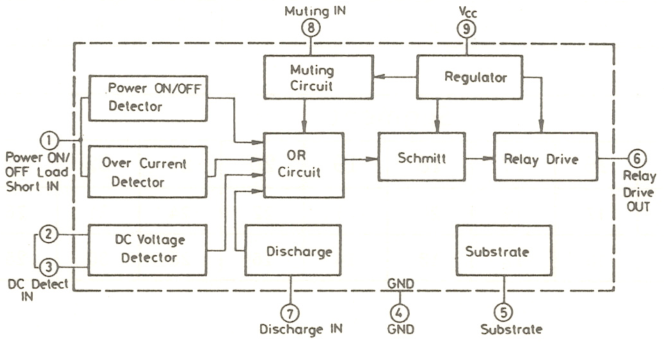

NC 1
DIN 2
WE 3
RAS 4
A0 5
A2 6
A1 7
Vcc 8
16 Vss
15 CAS
14 DOUT
13 A6
12 A3
11 A4
10 A5
9 A7

Pin Name	Function
A0 ~ A7	Address input
RAS	Row address strobe
CAS	Column address strobe
WE	Write enable
DIN	Data input
DOUT	Data output
VCC	Power supply (5 V)
VSS	Ground (0 V)

■ VC5022-2 (IC751, IC752)

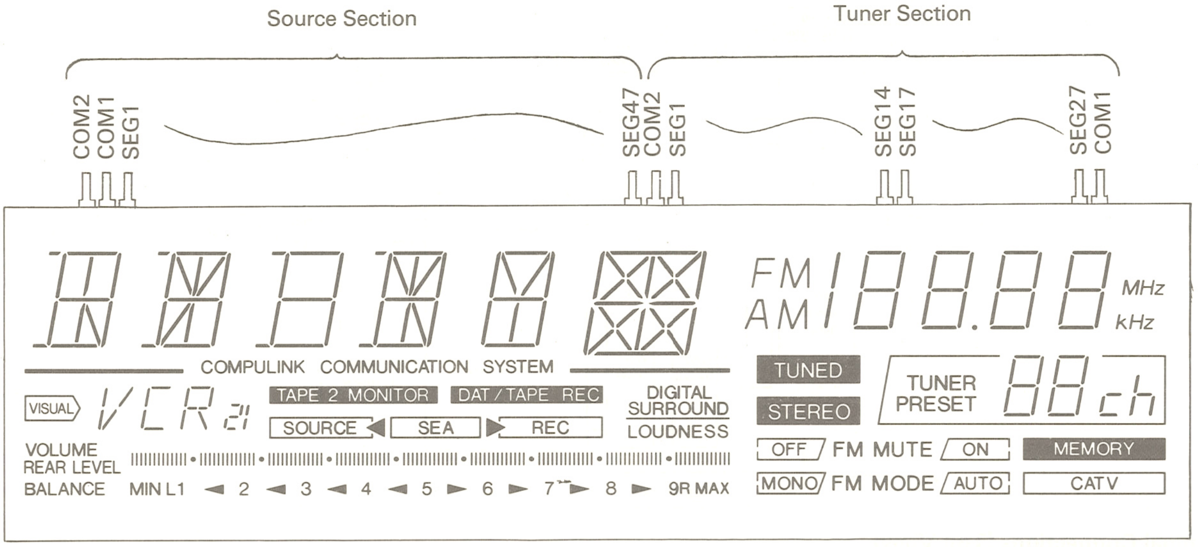

Super-A
Drive⊕ 1
9 Thermal Compen-sation
Thermal Compen-sation 2
8
3
7
4
6 Center point
Drive⊖ 5

■ TA7317P (IC901, IC961)

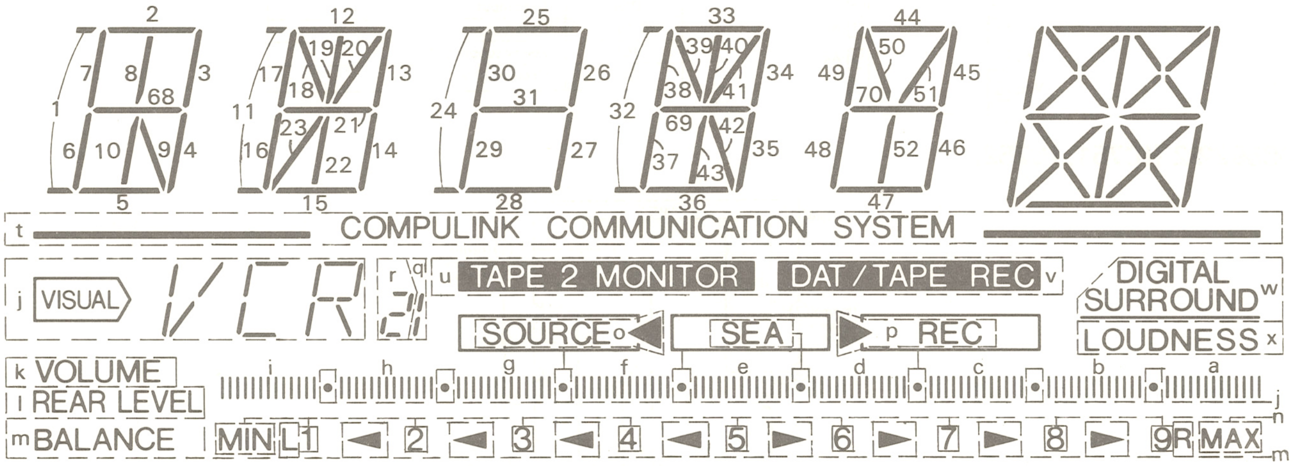

Muting IN 8
Vcc 9
Muting Circuit
Regulator
Power ON/OFF Detector
Over Current Detector
OR Circuit
Schmitt
Relay Drive
1 Power ON/OFF Load Short IN
6 Relay Drive OUT
DC Voltage Detector
2
3 DC Detect IN
Discharge
Substrate
GND
7 Discharge IN
4 GND
5 Substrate

Internal Wiring of LCD (LC421 : ELU0002-044)

■ Terminal Layout


Source Section
Tuner Section
COM2
COM1
SEG1
SEG47
COM2
SEG1
SEG14
SEG17
SEG27
COM1
FM
AM
MHz
kHz
COMPULINK COMMUNICATION SYSTEM
VISUAL
VCR
TAPE 2 MONITOR
DAT / TAPE REC
DIGITAL SURROUND
LOUDNESS
SOURCE
SEA
REC
VOLUME
REAR LEVEL
BALANCE
MIN L1 2 3 4 5 6 7 8 9R MAX
TUNED
STEREO
TUNER PRESET
ch
OFF
FM MUTE
ON
MEMORY
MONO
FM MODE
AUTO
CATV

■ Source Section

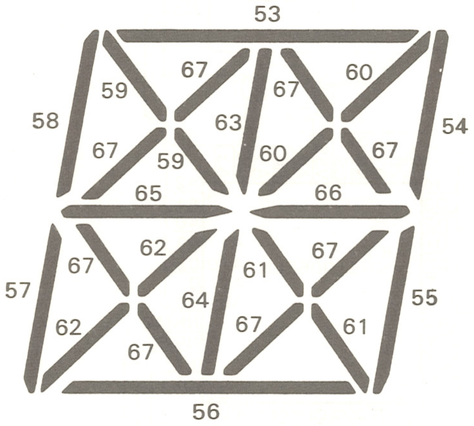

2
7
8
68
3
1
6
10
9
4
5
12
19
20
17
13
18
11
23
21
16
22
14
15
25
30
26
31
24
29
27
28
33
39
40
34
38
41
32
69
42
37
35
43
36
44
50
49
45
70
51
48
52
46
47
t
COMPULINK COMMUNICATION SYSTEM
j
VISUAL
VCR
r
q
u
TAPE 2 MONITOR
DAT / TAPE REC
v
DIGITAL SURROUND
w
SOURCE
o
SEA
p
REC
LOUDNESS
x
k
VOLUME
l
REAR LEVEL
i
h
g
f
e
d
c
b
a
m
BALANCE
MIN L1 2 3 4 5 6 7 8 9R MAX
n

Common	Segment											
	1	2	3	4	5	6	7	8	9	10	11	12
1	a	c	e	g	i	n	k	q	1	10	68	8
2	b	d	f	h	l	m	r	u	5	6	7	2

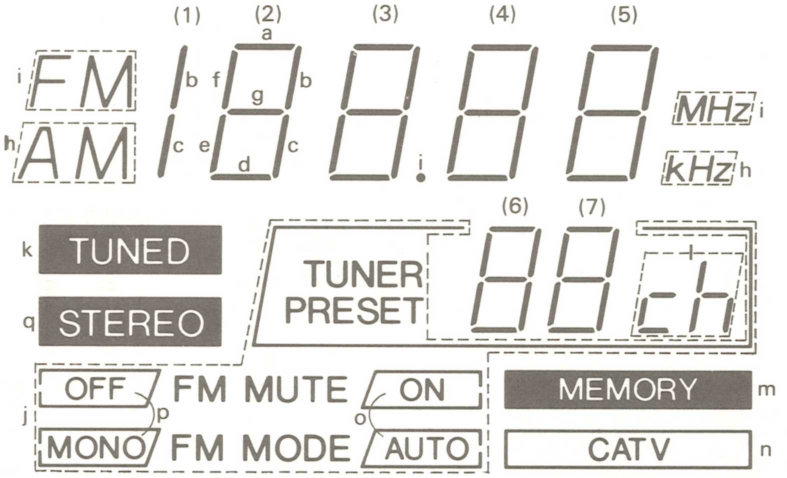
Common	Segment											
	13	14	15	16	17	18	19	20	21	22	23	24
1	3	11	23	17	19	20	21	22	24	31	26	27
2	4	9	16	18	12	13	14	15	28	30	25	29

Common	Segment											
	25	26	27	28	29	30	31	32	33	34	35	36
1	32	43	39	40	34	69	42	52	70	50	51	46
2	36	37	38	33	41	35	47	48	49	44	45	t

Common	Segment										
	37	38	39	40	41	42	43	44	45	46	47
1	57	65	58	53	54	55	56	67	p	x	j
2	62	66	59	63	60	61	64	–	o	w	v


53
67
60
59
67
58
63
54
67
60
67
59
65
66
62
67
67
61
57
64
55
62
67
61
67
56

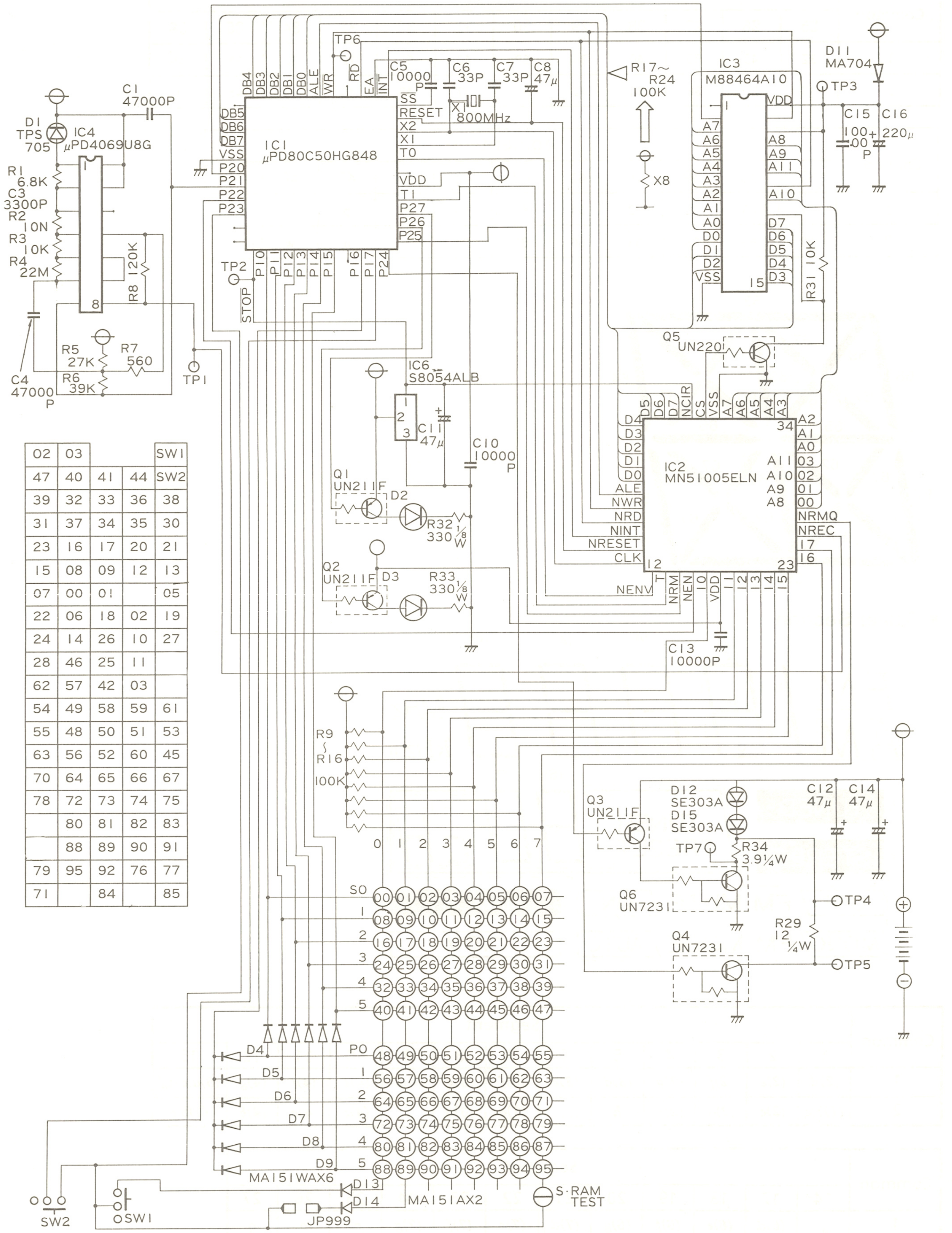
Tuner Section


(1)
(2)
(3)
(4)
(5)
a
i
FM
b
f
g
b
MHz
i
h
AM
c
e
d
c
i
kHz
h
(6)
(7)
k
TUNED
TUNER
PRESET
ch
q
STEREO
OFF
FM MUTE
ON
MEMORY
m
j
p
o
MONO
FM MODE
AUTO
CATV
n

Common	Segment												
	1	2	3	4	5	6	7	8	9	10	11	12	13
1	*(2)d*	*(2)e*	*(2)f*	*(2)g*	*(3)d*	*(3)e*	*(3)f*	*(3)g*	*(4)d*	*(4)e*	*(4)f*	*(4)g*	*(5)a,c,d,f*
2	*(1)b,c*	*(2)c*	*(2)a*	*(2)b*	*h*	*(3)c*	*(3)a*	*(3)b*	*i*	*(4)c*	*(4)a*	*(4)b*	*(5)b,e*

Common	Segment											
	14	17	18	19	20	21	22	23	24	25	26	27
1	*j*	*(6)d*	*(6)e*	*(6)f*	*(6)g*	*(7)d*	*(7)e*	*(7)f*	*(7)g*	*m*	*o*	*q*
2	*(5)g*	*k*	*(6)c*	*(6)a*	*(6)b*	*l*	*(7)c*	*(7)a*	*(7)b*	*n*	*p*	—

Remote Control Unit (RM-SR777)


IC1
μPD80C50HG848
IC2
MN51005ELN
IC3
M88464A10
IC4
μPD4069U8G
IC6
S8054ALB
D1
TPS
705
C1
47000P
R1
6.8K
C3
3300P
R2
10N
R3
10K
R4
22M
R8 120K
C4
47000
P
R5
27K
R6
39K
R7
560
TP1
TP2
TP3
TP4
TP5
TP6
TP7
STOP
C5
10000
P
C6
33P
C7
33P
C8
47μ
X1
800MHz
R17～
R24
100K
X8
D11
MA704
C15
100
00
P
C16
220μ
R31 10K
Q5
UN2201
C11
47μ
C10
10000
P
Q1
UN211F
D2
R32
330 1/8 W
Q2
UN211F
D3
R33
330 1/8 W
C13
10000P
R9
～
R16
100K
Q3
UN211F
D12
SE303A
D15
SE303A
R34
3.9 1/4W
C12
47μ
C14
47μ
Q6
UN7231
R29
12
1/4W
Q4
UN7231
S0
P0
D4
D5
D6
D7
D8
D9
MA151WAX6
D13
D14
MA151AX2
JP999
S·RAM
TEST
SW1
SW2

02	03			SW1
47	40	41	44	SW2
39	32	33	36	38
31	37	34	35	30
23	16	17	20	21
15	08	09	12	13
07	00	01		05
22	06	18	02	19
24	14	26	10	27
28	46	25	11	
62	57	42	03	
54	49	58	59	61
55	48	50	51	53
63	56	52	60	45
70	64	65	66	67
78	72	73	74	75
	80	81	82	83
	88	89	90	91
79	95	92	76	77
71		84		85

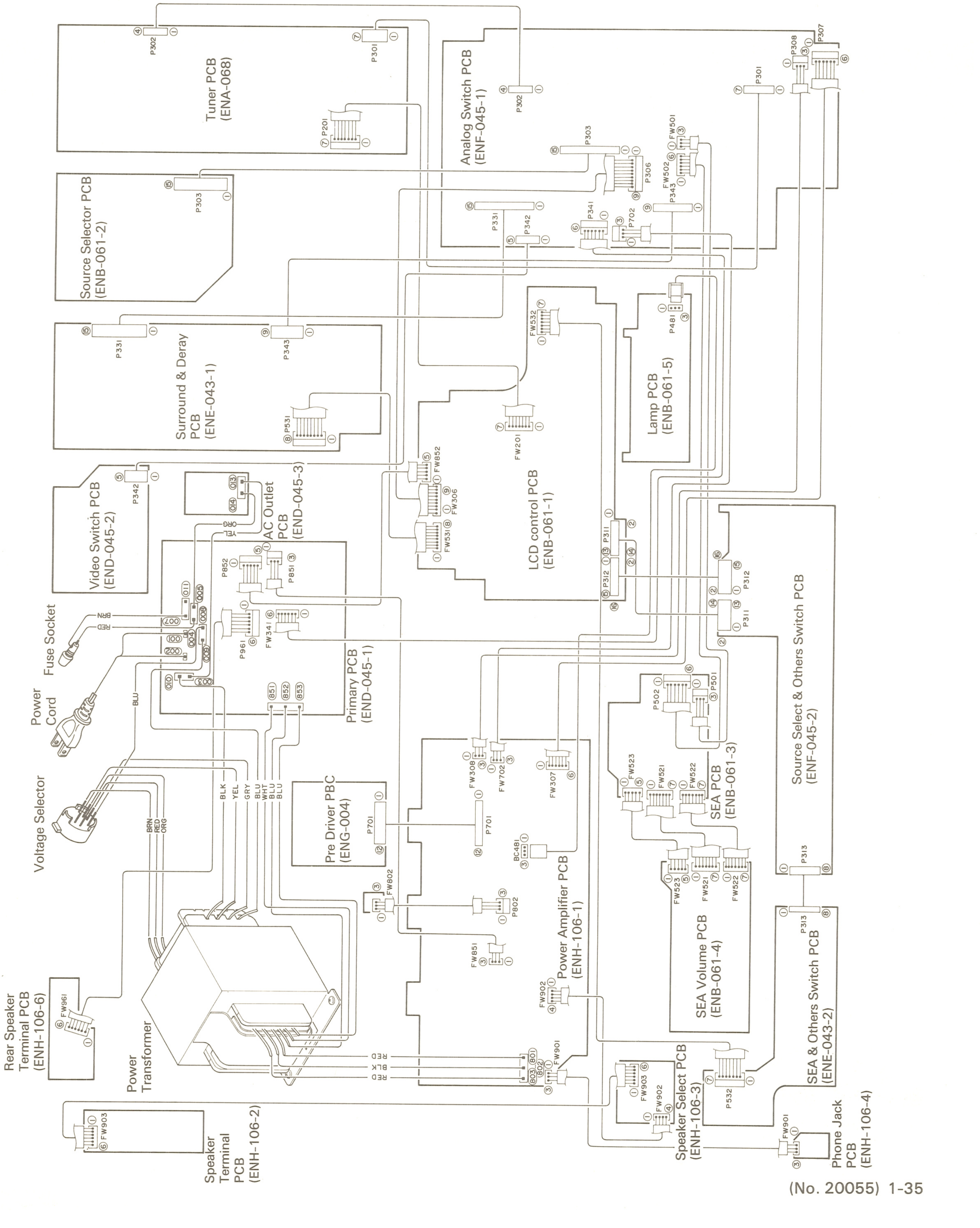
No.	EUR6650 (JP. OPEN)		
00	TV	P.	03 17
01	VCR	P.	43 0B
02	DISC		MODE CHANGE
03	9		*
04	—		—
05	SLEEP		A3 03
06	PRGM		B3 71
07	AUDIO	P.	A3 17
08	U		LEARN
09	V		↓
10	3		*
11	6		*
12	W		LEARN
13	X		↓
14	1		*
15	T		LEARN
16	P		│
17	Q		↓
18	MAG. P		B3 73
19	TRACK		MODE CHANGE
20	R		LEARN
21	S		↓
22	CONT.		B3 77
23	O		LEARN
24	FM		A3 08
25	5		*
26	2		*
27	TV ch		A3 10 43 10
28	AM		A3 09
29	—		—
30	N		LEARN
31	J		│
32	F		│
33	G		│
34	L		│
35	M		│
36	H		│
37	K		│
38	I		│
39	E		│
40	B		│
41	C		↓
42	8		*
43	—		—
44	D		LEARN
45	IOKEY (CD)		MODE CHANGE
46	4		*
47	A		LEARN
48	■ (PHONO)		B3 03
49	10		*

No.	EUR6650 (JP. OPEN)	
50	CH−	*
51	CH+	*
52	⏮ (CD)	B3 58
53	SUR. ON/OFF	A3 05
54	VCR 2	A2 12 03 11
55	▶ (PHONO)	A3 3C
56	■ (CD)	B3 43
57	7	*
58	+10	*
59	0	*
60	⏭ (CD)	B3 59
61	SEA SOU.	A3 30
62	VCR 1	A3 11 03 11
63	▶ (CD)	A3 3D
64	■ (TAPE1)	83 43
65	⏮ (TAPE1)	83 18
66	⏭ (TAPE1)	83 19
67	◀▶ (TAPE1)	83 0B
68	—	—
69		
70	▶ (TAPE1)	A3 3F
71	MUTE	A3 1C
72	DELAY	A3 48
73	MODE	A3 58
74	REAR−	A3 4F
75	REAR+	A3 4E
76	▶	*
77	▶▶	*
78	TAPE2	A3 07
79	DAT	MODE CHANGE
80	■ (DAT)	93 53
81	⏮ (DAT)	93 68
82	⏭ (DAT)	93 69
83	IOKEY (DAT)	
84	VOL. −	A3 1F
85	VOL. +	A3 1E
86	▶ (DAT)	93 5C
87	—	—
88	VCR	*
89	❚❚	*
90	■	*
91	●	*
92	◀◀	*
93		
94	—	—
95	TAPE1	MODE CHANGE

Parts List

Parts Number	Parts Name	Q'ty	Description
EUR66EC3A	Battery Cover	1	
ECR66CS2A	Bottom Case	1	
EUR66CS36	Upper Case	1	
EUR64SB125	Smoked Plate	1	
EUR66CT5C	Rubber Contact	1	
EUR66TM85	Slide Knob	1	(USE/LEARN)
EUR66TM8	Slide Knob	1	(1/2)
EUR66PP37A	Name Plate	1	
EUR66TD21	Battery Contact	1	(+)
EUR66TD22	Battery Spring	1	(−)
EUR64TD668	Common Contact	2	(+, −)
EUR60TD48	Common Contact	1	(+, −)
SSSB2008M	Tappiog Screw	1	(for Bottom Case)
SDSF2005M	Tapping Screw	2	(for Main PC Board)
EUR66VPB20	Main PC Board Ass'y	1 set	(t=1)
μPD80C50HG848	Microcomputer	1	IC1
MN51005ELN	Gate Array	1	IC2
MB8464A10MAT	S-RAM	1	IC3
S8054ALB	Reset IC	1	IC6
UN211FTW	Tip Transistor	3	Q1, Q2, Q3
UN7231TW	Tip Transistor	1	Q4
UN221DTW	Tip Transistor	1	Q5
UN7231TW	Tip Transistor	1	Q6
LN1361C	LED	1	D2 (Green)
LN1261C	LED	1	D3 (Red)
MA151WATW	Tip Diode	6	D4~D9
MA704TW	Tip Diode	1	D11
SE303AS	LED	2	D12, D15
MA151ATW	Tip Diode	1	D13, D14
CSA800MT	Ceramic Oscillator	1	X1
ESD10621	Slide Switch	2	SW1, SW2
EUR66VPB18	Sub PC Board Ass'y	1 set	(t=1.2)
MPD4069U8G	Microcomputer	1	IC4
TPS705	Diode	1	D1

Connection Diagram


Tuner PCB (ENA-068)
P302
P301
P201
Analog Switch PCB (ENF-045-1)
P302
P303
P306
FW501
FW502
P343
P331
P342
P341
P702
P301
P308
P307
Source Selector PCB (ENB-061-2)
P303
Surround & Deray PCB (ENE-043-1)
P331
P343
P531
Lamp PCB (ENB-061-5)
P481
FW532
FW201
LCD control PCB (ENB-061-1)
FW852
FW306
FW531
P311
P312
Video Switch PCB (END-045-2)
P342
AC Outlet PCB (END-045-3)
ORG
YEL
Primary PCB (END-045-1)
P852
P851
P961
FW341
851
852
853
Fuse Socket
BRN
RED
Power Cord
BLU
Voltage Selector
BRN
RED
ORG
BLK
YEL
GRY
BLU
WHT
BLU
BLU
Source Select & Others Switch PCB (ENF-045-2)
P312
P311
P501
P502
SEA PCB (ENB-061-3)
FW523
FW521
FW522
Pre Driver PBC (ENG-004)
P701
Power Amplifier PCB (ENH-106-1)
FW308
FW702
FW307
P701
BC481
FW802
P802
FW851
FW902
FW901
801
802
803
RED
BLK
RED
SEA Volume PCB (ENB-061-4)
FW523
FW521
FW522
P313
SEA & Others Switch PCB (ENE-043-2)
P313
P532
Speaker Select PCB (ENH-106-3)
FW903
FW902
Phone Jack PCB (ENH-106-4)
FW901
Rear Speaker Terminal PCB (ENH-106-6)
FW961
Power Transformer
Speaker Terminal PCB (ENH-106-2)
FW903

JVC

SERVICE MANUAL

COMPUTER CONTROLLED RECEIVER

MODEL No. **RX-777VBK**
RX-777VSBK
RX-777VLBK

Supplement

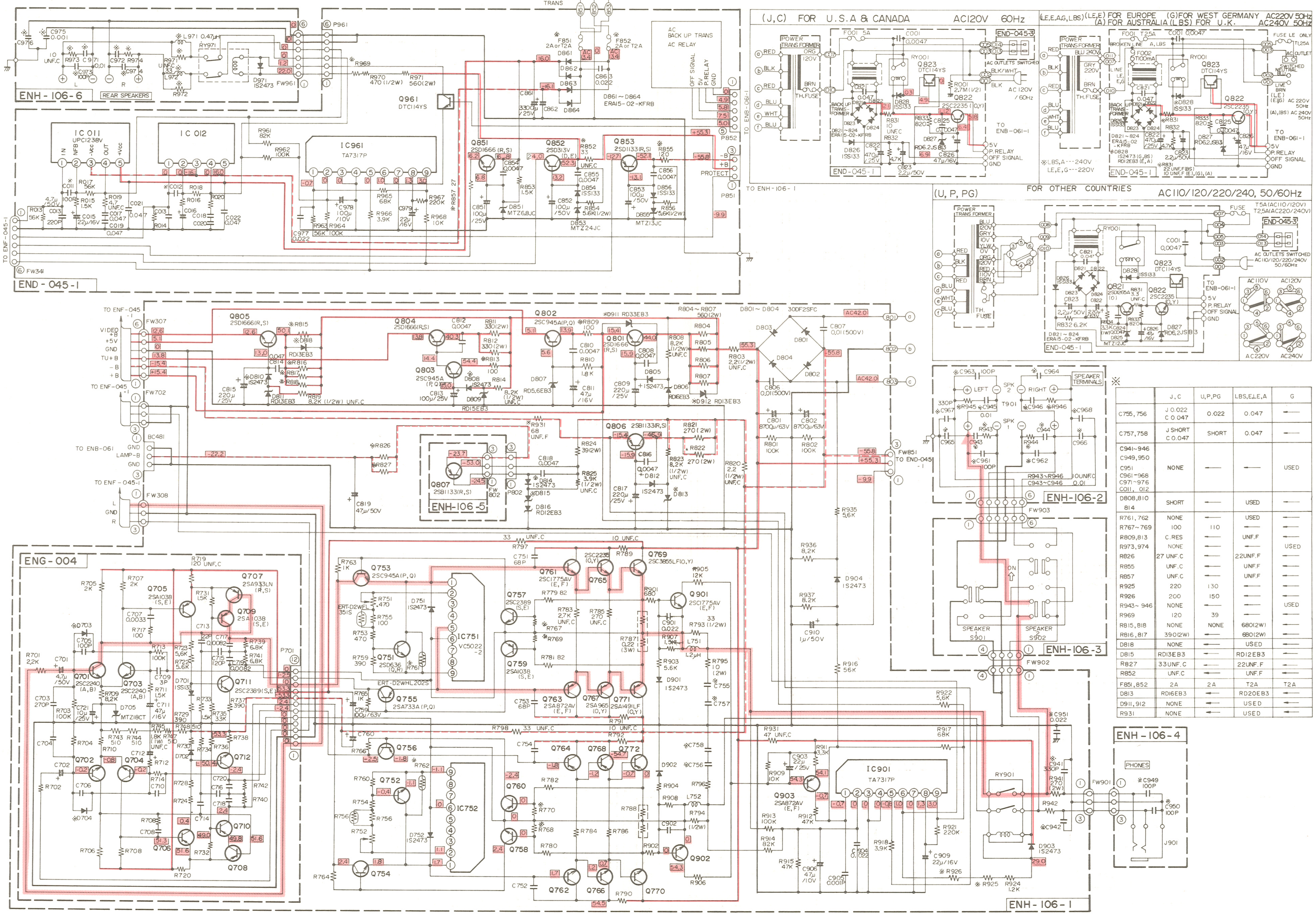
It is announced that the latest products of this model have been partially altered in the circuits for raising the efficiency.
For servicing this model, refer to the service manual (No. 20055) together with this supplement.

- Improved circuit boards : Power Amplifier Section
  Source Selector and SEA Control Section
  Video Selector and Surround Section
- Serial numbers of altered products :
  - RX-777VBKJ (only for the U.S.A.) .... of and after # 00003016
  - RX-777VSBKJ (only for the U.S.A.) .... of and after # 00002501
  - Other types of this series .... all products

No. 20055B
Sep. 1988

Schematic Diagrams

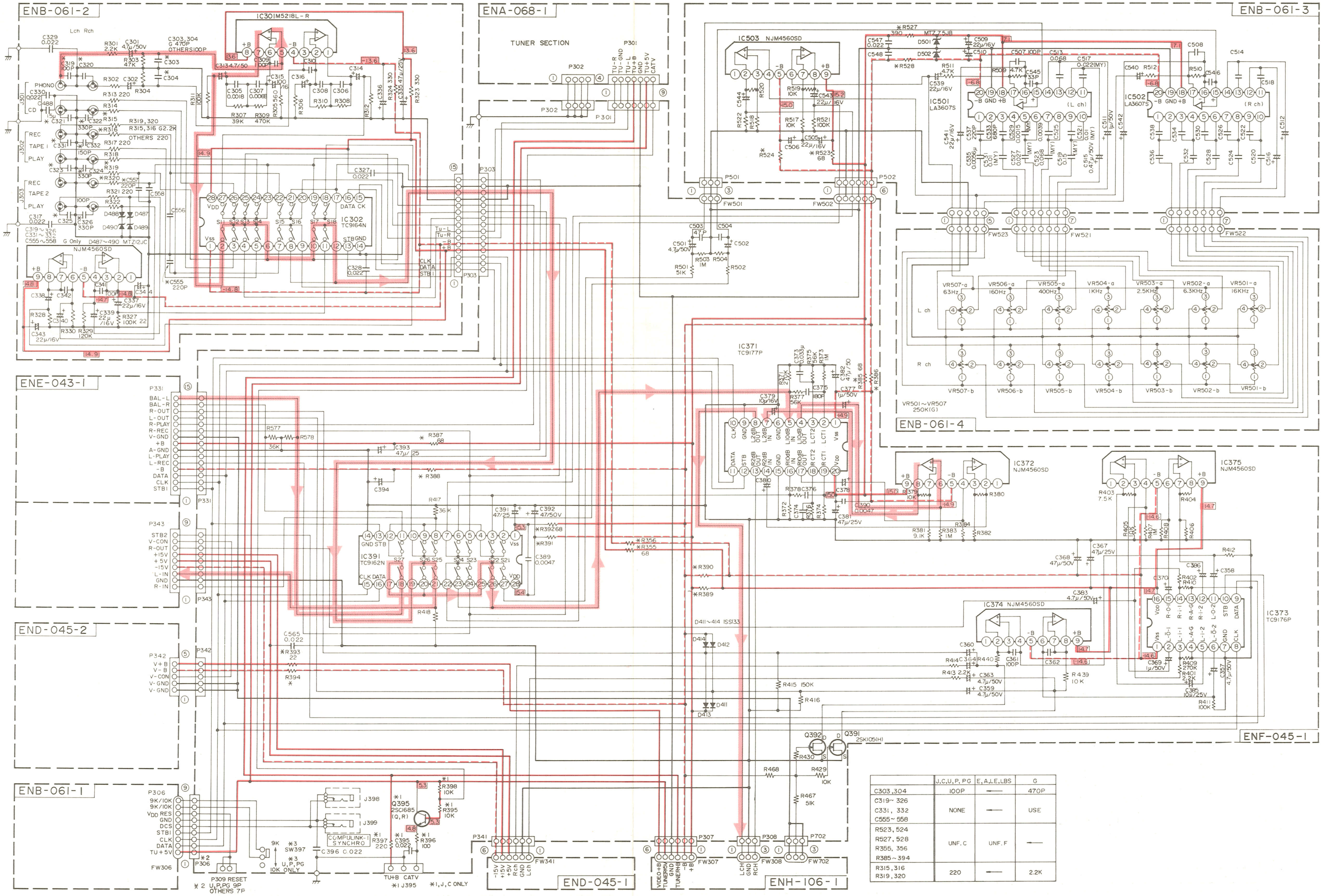
(4) Power Amplifier Section


ENH-106-6
REAR SPEAKERS
TO POWER TRANS
AC BACK UP TRANS
AC RELAY
Q961 DTC114YS
IC011 UPC1238V
IC012
IC961 TA7317P
Q851 2SD1666(R,S)
Q852 2SD313V (D,E)
Q853 2SD1133(R,S)
PROTECT
END-045-1
TO ENF-045-1
FW341
TO ENB-106-1
(J,C) FOR U.S.A & CANADA AC120V 60Hz
(LE,E,AG,LBS)(LE,E) FOR EUROPE (G)FOR WEST GERMANY AC220V 50Hz
(A) FOR AUSTRALIA (LBS) FOR U.K. AC240V 50Hz
POWER TRANS FORMER
END-045-3
TO ENB-061-1
5V
P.RELAY
OFF SIGNAL
GND
AC OUTLETS SWITCHED
(U, P, PG) FOR OTHER COUNTRIES AC110/120/220/240, 50/60Hz
AC110V AC120V AC220V AC240V
Q805 2SD1666(R,S)
Q804 2SD1666(R,S)
Q802 2SC945A(P,Q)
Q801 2SD1666(R,S)
Q803 2SC945A(P,Q)
D801~D804 300F2SFC
TO ENB-061
VIDEO +B +5V GND TU+B -B +B
FW307
FW702
FW308
BC481
Q806 2SB1133(R,S)
Q807 2SB1133(R,S)
ENH-106-5
ENH-106-2
ENH-106-3
SPEAKER TERMINALS
LEFT RIGHT
SPEAKER S901 SPEAKER S902
FW903
FW902
ENG-004
Q701 2SC2240(A,B)
Q703 2SC2240(A,B)
Q705 2SA1038(S,E)
Q707 2SA933LN(R,S)
Q709 2SA1038(S,E)
Q711 2SC2389(S,E)
Q702 Q704 Q706 Q708 Q710 Q712
P701
Q753 2SC945A(P,Q)
Q751 2SD636(Q,R)
Q755 2SA733A(P,Q)
IC751 VC5022-2
Q756 Q752 Q754
IC752
Q757 2SC2389(S,E)
Q759 2SA1038(S,E)
Q761 2SC1775AV(E,F)
Q763 2SA872AV(E,F)
Q765 2SC2238(O,Y)
Q767 2SA965(O,Y)
Q769 2SC3855LF(O,Y)
Q771 2SA1491LF(O,Y)
Q758 Q760 Q762 Q764 Q766 Q768 Q770 Q772
Q901 2SC1775AV(E,F)
Q902
Q903 2SA872AV(E,F)
IC901 TA7317P
RY901
FW901
ENH-106-1
ENH-106-4
PHONES
J901

※

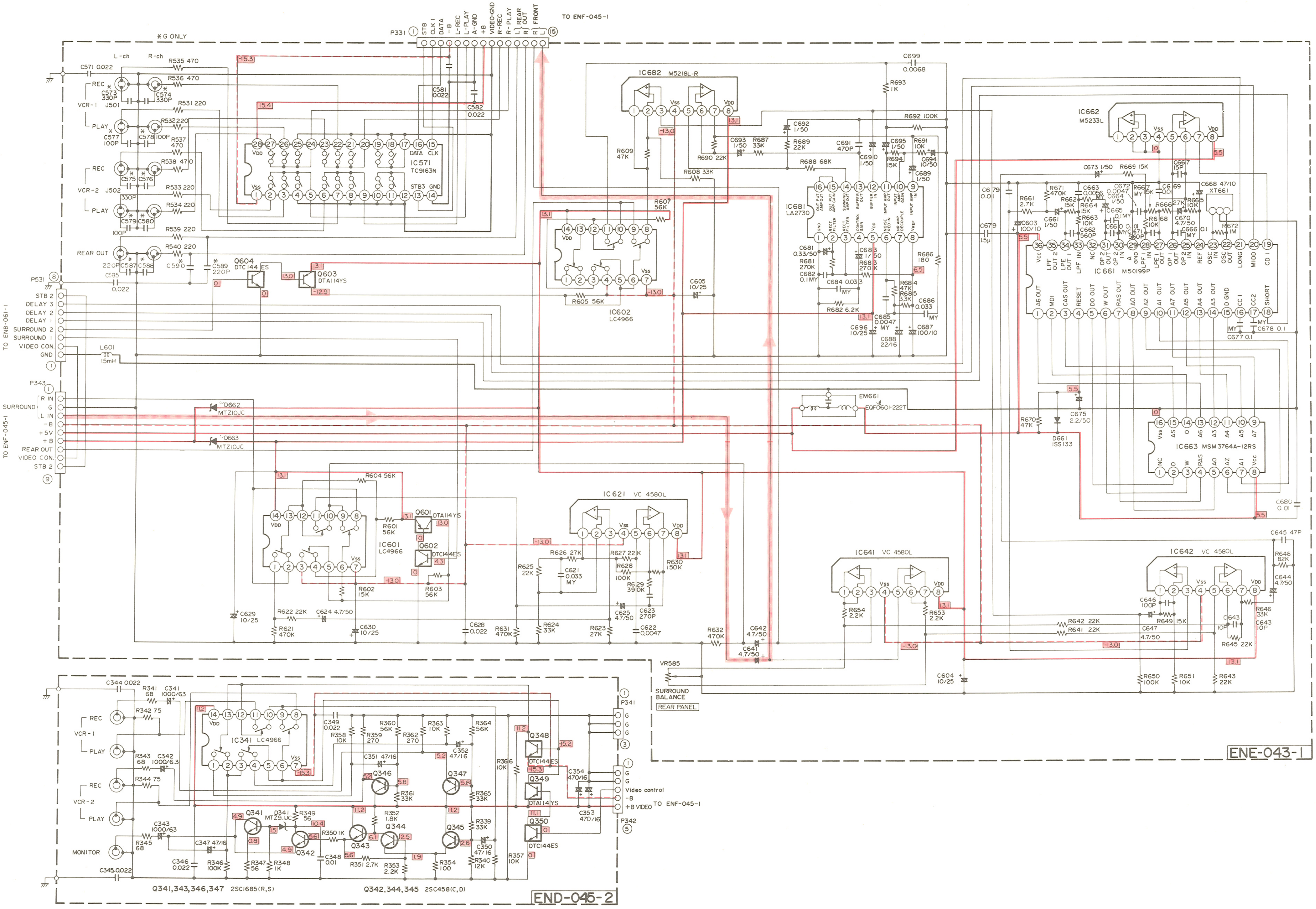
	J , C	U,P,PG	LBS,E,LE,A	G
C755, 756	J 0.022 C 0.047	0.022	0.047	←
C757, 758	J SHORT C 0.047	SHORT	0.047	←
C941~946 C949, 950 C951 C961~968 C971~976 C011, 012	NONE	←	←	USED
D808, 810 814	SHORT	←	USED	←
R761, 762	NONE	←	USED	←
R767~769	100	110	←	←
R809, 813	C.RES	←	UNF.F	←
R973, 974	NONE	←	←	USED
R826	27 UNF.C	←	22UNF.F	←
R855	UNF.C	←	UNF.F	←
R857	UNF.C	←	UNF.F	←
R925	220	130	←	←
R926	200	150	←	←
R943~946	NONE	←	←	USED
R969	120	39	←	←
R815, 818	NONE	NONE	680(2W)	←
R816, 817	390(2W)	←	680(2W)	←
D818	NONE	←	USED	←
D815	RD13EB3	←	RD12EB3	←
R827	33UNF.C	←	22UNF.F	←
R852	UNF.C	←	UNF.F	←
F851, 852	2A	2A	T2A	T2A
D813	RD16EB3	←	RD20EB3	←
D911, 912	NONE	←	USED	←
R931	NONE	←	USED	←

(5) Source Selector and SEA Control Section


ENB-061-2
Lch Rch
IC301 M5218L-R
PHONO
CD
REC TAPE 1 PLAY
REC TAPE 2 PLAY
J301
J302
J303
NJM4560SD
IC302 TC9164N
G Only D487~490 MTZ12JC
C319~326 C331~332 C555~558
ENA-068-1
TUNER SECTION
P301
P302
P303
TU-GND TU-R TU-L TU+B GND TU+5V CATV
ENB-061-3
IC503 NJM4560SD
IC501 LA3607S
IC502 LA3607S
(L ch)
(R ch)
P501
P502
FW501
FW502
FW521
FW522
FW523
VR507-a 63Hz
VR506-a 160Hz
VR505-a 400Hz
VR504-a 1KHz
VR503-a 2.5KHz
VR502-a 6.3KHz
VR501-a 16KHz
L ch
R ch
VR507-b
VR506-b
VR505-b
VR504-b
VR503-b
VR502-b
VR501-b
VR501~VR507 250K(G)
ENB-061-4
ENE-043-1
P331
BAL-L BAL-R R-OUT L-OUT R-PLAY R-REC V-GND +B A-GND L-PLAY L-REC -B DATA CLK STB1
P343
STB2 V-CON R-OUT +15V +5V -15V L-IN GND R-IN
IC371 TC9177P
IC391 TC9162N
IC372 NJM4560SD
IC375 NJM4560SD
IC374 NJM4560SD
IC373 TC9176P
END-045-2
P342
V+B V-B V-CON V-GND V-GND
D411~414 1SS133
Q392
Q391 2SK105(H)
ENF-045-1
ENB-061-1
P306
9K/10K 9K/10K VDD RES GND DCS STB1 CLK DATA TU+5V
FW306
P309 RESET
*2 U,P,PG 9P OTHERS 7P
J398
J399
COMPULINK-1 SYNCHRO
Q395 2SC1685 (Q,R)
SW397
*3 U,P,PG 10K ONLY
TU+B CATV
*1 J395
*1, J, C ONLY
P341
FW341
+15V -15V +5V Rch GND Lch
END-045-1
P307
FW307
VIDEO+B TUNER+B GND TUNER+B +B
P308
FW308
LCH GND RCH
P702
FW702
ENH-106-1

	J,C,U,P, PG	E,A,LE,LBS	G
C303,304	100P	←	470P
C319~326 C331, 332 C555~558	NONE	←	USE
R523,524 R527,528 R355, 356 R385~394	UNF.C	UNF.F	←
R315,316 R319,320	220	←	2.2K

(6) Video Selector and Surround Section


TO ENF-045-I
P331
STB
CLK I
DATA
+B
L-REC
L-PLAY
A-GND
+B
VIDEO-GND
R-REC
R-PLAY
L REAR OUT
R REAR OUT
FRONT
＊G ONLY
L-ch
R-ch
C571 0022
R535 470
R536 470
REC
PLAY
VCR-I J501
VCR-2 J502
C573 330P
C574 330P
C577 100P
C578 100P
R531 220
R532 220
R533 220
R534 220
R537 470
R538 470
R539 220
R540 220
REAR OUT
C589 220P
C590
C595 0.022
C581 0022
C582 0.022
IC571 TC9163N
DATA
CLK
STB3
GND
VDD
VSS
Q604 DTC144ES
Q603 DTA114YS
P531
STB 2
DELAY 3
DELAY 2
DELAY I
SURROUND 2
SURROUND I
VIDEO CON.
GND
TO ENB-061-I
L601 15mH
P343
SURROUND
R IN
G
L IN
-B
+5V
+B
REAR OUT
VIDEO CON.
STB 2
TO ENF-045-I
D662 MTZ10JC
D663 MTZ10JC
IC682 M5218L-R
C699 0.0068
R693 1K
R692 100K
R609 47K
R608 33K
R607 56K
R690 22K
C692 1/50
C693 1/50
R687 33K
R689 22K
R688 68K
C691 470P
C695 1/50
R691 10K
R694 15K
C694 10/50
C689 1/50
C690 1/50
IC681 LA2730
C681 0.33/50
R681 270K
C682 0.1MY
C684 0.033 MY
C683 1/50
R683 270K
R684 47K
R685 3.3K
C686 0.033 MY
R686 180
R682 6.2K
C685 0.0047 MY
C696 10/25
C687 100/10
C688 22/16
IC602 LC4966
R605 56K
C605 10/25
IC662 M5233L
C673 1/50
R669 15K
C667 15P
C668 47/10
XT661
C679 0.01
C679 1.5μ
R661 2.7K
R671 470K
C603 100/10
C661 1/50
R662 15K
R663 10K
C662 560P
C663 0.0056
C672 0.0047
C664 1/50
R664 15K
C665 0.1MY
C666 0.01
R667 15K
C669 0.01
R665 10K
R668 10K
C670 4.7/50
C671 560P
C6661 0.1
R672 1M
IC661 M50199P
C677 0.1
C678 0.1
EM661 EQF0601-222T
R670 47K
D661 ISS133
C675 2.2/50
IC663 MSM3764A-12RS
C680 0.01
IC621 VC 4580L
IC601 LC4966
Q601 DTA114YS
Q602 DTC144ES
R601 56K
R602 15K
R603 56K
R604 56K
R621 470K
R622 22K
C624 4.7/50
C629 10/25
C630 10/25
C628 0.022
R631 470K
R625 22K
C621 0.033 MY
R626 27K
R627 22K
R628 100K
R629 390K
R630 150K
R624 33K
R623 27K
C625 4.7/50
C623 270P
C622 0.0047
R632 470K
C642 4.7/50
C641 4.7/50
IC641 VC 4580L
R654 2.2K
R653 2.2K
C604 10/25
VR585
SURROUND BALANCE
REAR PANEL
IC642 VC 4580L
C645 47P
R646 82K
C644 4.7/50
C646 100P
R642 22K
R641 22K
R649 15K
C647 4.7/50
C643 10P
R645 22K
R646 33K
C643 10P
R650 100K
R651 10K
R643 22K
ENE-043-I
C344 0022
R341 68
C341 1000/63
R342 75
R343 68
C342 1000/6.3
R344 75
C343 1000/63
R345 68
C345 0.022
C346 0.022
MONITOR
IC341 LC4966
C349 0.022
R358 10K
R359 270
R360 56K
R362 270
R363 10K
R364 56K
C351 47/16
C352 47/16
Q346
Q347
R361 33K
R365 33K
R366 10K
Q348 DTC144ES
Q349 DTA114YS
Q350 DTC144ES
C354 470/16
C353 470/16
Q341
D341 MTZ9.1JC
R349 56
Q342
Q343
Q344
Q345
R350 1K
R352 1.8K
R339 33K
C350 47/16
R340 12K
R357 10K
C347 47/16
R346 100K
R347 56
R348 1K
C348 001
R351 2.7K
R353 2.2K
R354 100
P341
P342
Video control
+B VIDEO
TO ENF-045-I
Q341,343,346,347 2SC1685(R,S)
Q342,344,345 2SC458(C,D)
END-045-2

JVC

SERVICE MANUAL

COMPUTER CONTROLLED RECEIVER

MODEL No. **RX-777VBK**
RX-777VSBK
RX-777VLBK

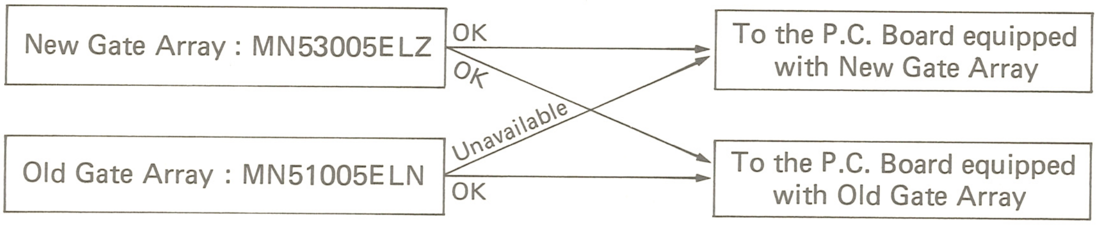
Supplement

Notice of the Change of Parts:
In mid course of production of the Remote Control Unit (RM-SR777), an accessory of the RX-777VBK/VSBK/VLBK, the Gate Array (IC2) installed in the RM-SR777 has been changed as follows:

Gate Array in early products	→	Gate Array in late products
MN51005ELN		MN53005ELZ

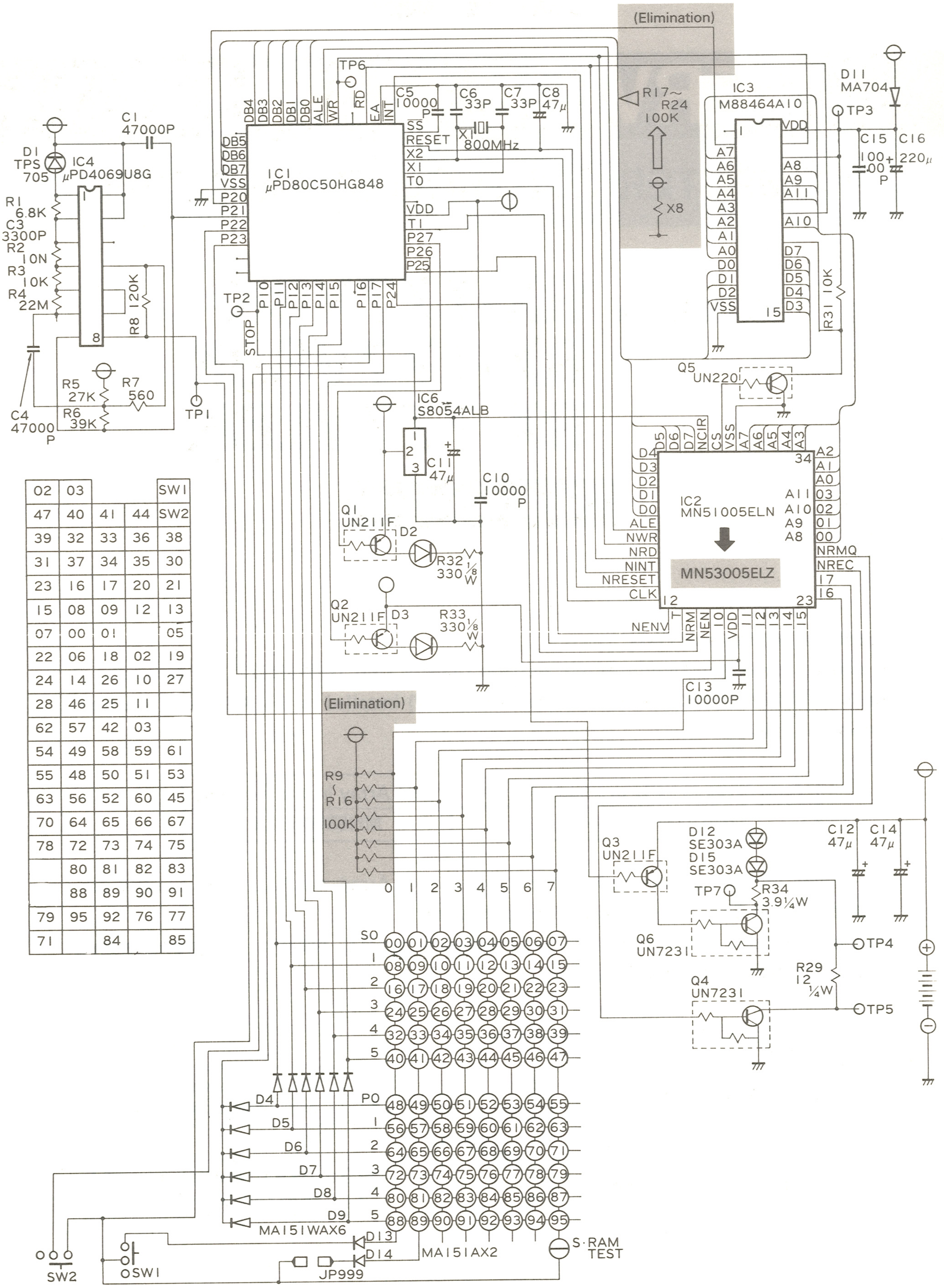
Since there are no resistors built in the previous Gate Array, the P.C. board of early products of the RM-SR777 is equipped with 16 resistors.
On the other hand, there are no resistors installed in the P.C. board of late products since resistors are built in the new Gate Array.

■ **Replaceability of New and Old Gate Arrays**


New Gate Array : MN53005ELZ
OK
OK
Unavailable
Old Gate Array : MN51005ELN
OK
To the P.C. Board equipped with New Gate Array
To the P.C. Board equipped with Old Gate Array

No. 20055C
Feb. 1989

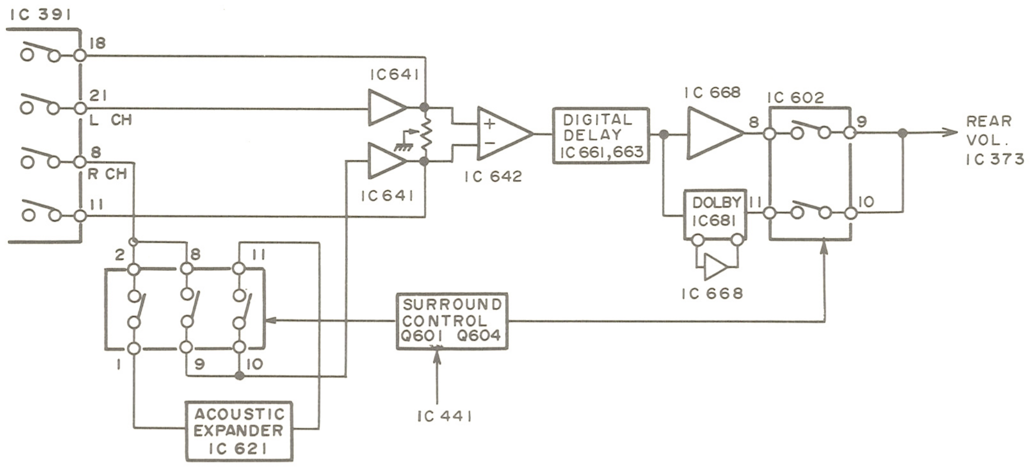
Remote Control Unit (RM-SR777)


(Elimination)
R17~R24 100K
X8
IC1 μPD80C50HG848
DB0 DB1 DB2 DB3 DB4 DB5 DB6 DB7
ALE WR RD EA INT
SS RESET X2 X1 T0 VDD T1 VSS
P10 P11 P12 P13 P14 P15 P16 P17
P20 P21 P22 P23 P24 P25 P26 P27
TP6
C5 10000P
C6 33P
C7 33P
C8 47μ
X1 800MHz
TP2
STOP
IC3 M88464A10
A0 A1 A2 A3 A4 A5 A6 A7 A8 A9 A10 A11
D0 D1 D2 D3 D4 D5 D6 D7
VDD VSS
D11 MA704
TP3
C15 100.00P
C16 220μ
R31 10K
Q5 UN220
C1 47000P
D1 TPS705
IC4 μPD4069U8G
R1 6.8K
C3 3300P
R2 10N
R3 10K
R4 22M
R8 120K
C4 47000P
R5 27K
R6 39K
R7 560
TP1
IC6 S8054ALB
C11 47μ
C10 10000P
Q1 UN211F
D2
R32 330 1/8W
Q2 UN211F
D3
R33 330 1/8W
IC2 MN51005ELN
MN53005ELZ
ALE NWR NRD NINT NRESET CLK NENV
CS NCIR VSS
NRM NEN VDD
NRMQ NREC
C13 10000P
(Elimination)
R9 ~ R16 100K
S0
P0
D4 D5 D6 D7 D8 D9
MA151WAX6
D13 D14
MA151AX2
S·RAM TEST
SW2
SW1
JP999
Q3 UN211F
D12 SE303A
D15 SE303A
TP7
R34 3.9 1/4W
Q6 UN7231
TP4
R29 12 1/4W
Q4 UN7231
TP5
C12 47μ
C14 47μ

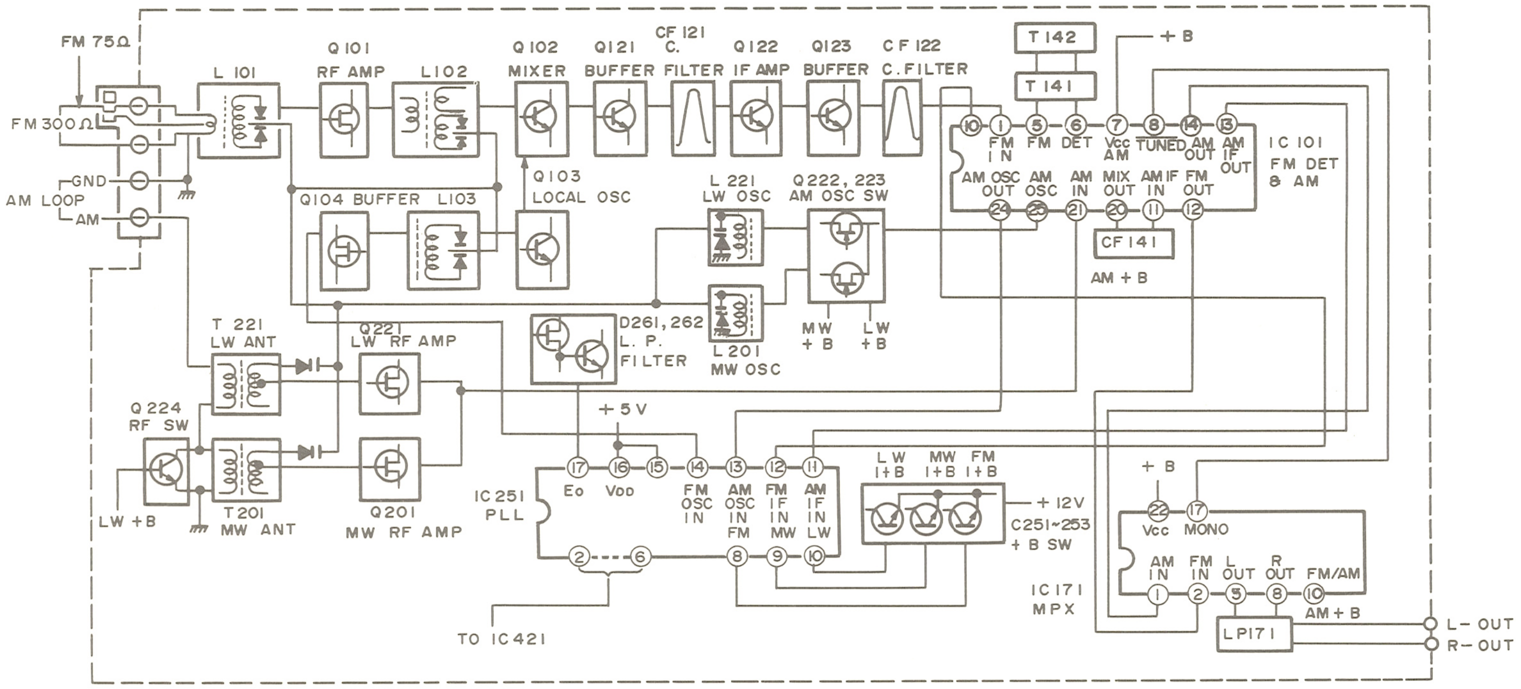
02	03			SW1
47	40	41	44	SW2
39	32	33	36	38
31	37	34	35	30
23	16	17	20	21
15	08	09	12	13
07	00	01		05
22	06	18	02	19
24	14	26	10	27
28	46	25	11	
62	57	42	03	
54	49	58	59	61
55	48	50	51	53
63	56	52	60	45
70	64	65	66	67
78	72	73	74	75
	80	81	82	83
	88	89	90	91
79	95	92	76	77
71		84		85

Block Diagram

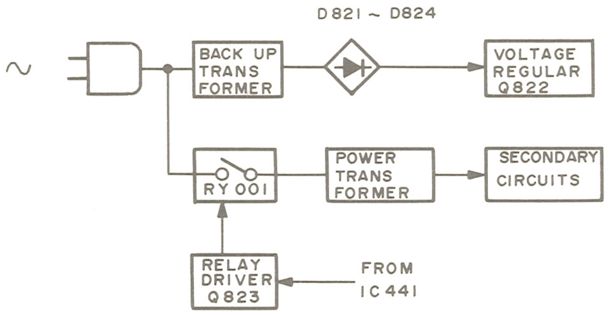
Surround Section


IC 391
18
21
L CH
8
R CH
11
IC641
IC641
IC 642
DIGITAL DELAY IC 661, 663
IC 668
8
IC 602
9
REAR VOL. IC 373
DOLBY IC681
11
10
IC 668
2
8
11
1
9
10
SURROUND CONTROL Q601 Q604
IC 441
ACOUSTIC EXPANDER IC 621

Tuner Section

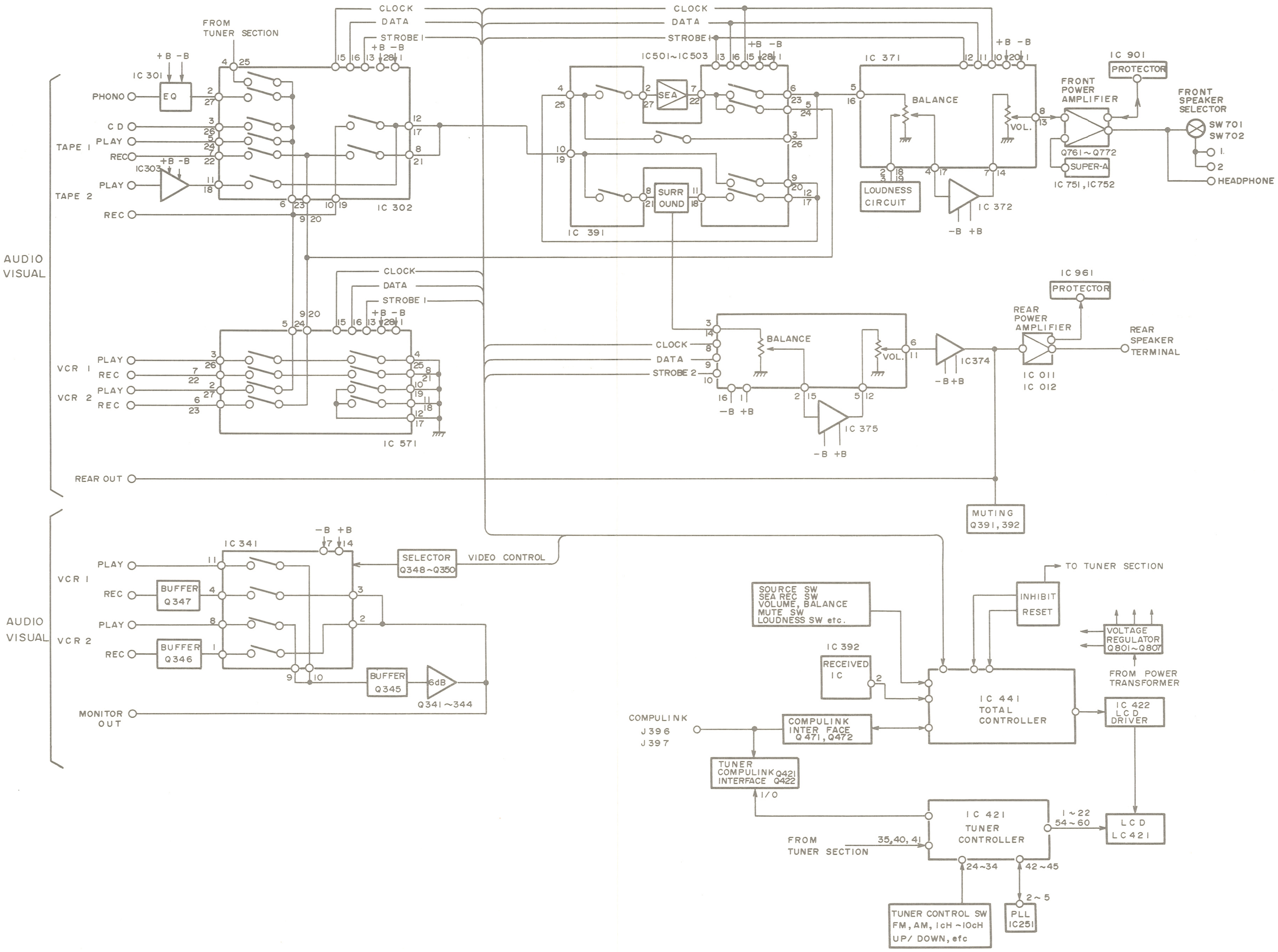

FM 75Ω
FM 300 Ω
GND
AM LOOP
AM
L 101
Q 101 RF AMP
L102
Q 102 MIXER
Q121 BUFFER
CF 121 C. FILTER
Q122 IF AMP
Q123 BUFFER
CF 122 C. FILTER
T 142
T 141
+ B
Q103 LOCAL OSC
Q104 BUFFER
L103
L 221 LW OSC
Q 222, 223 AM OSC SW
IC 101 FM DET & AM
10
1 FM IN
5 FM
6 DET
7 Vcc AM
8 TUNED
14 AM OUT
13 AM IF OUT
24 AM OSC OUT
23 AM OSC
21 AM IN
20 MIX OUT
11 AM IF IN
12 FM OUT
CF 141
AM + B
MW + B
LW + B
D261, 262 L. P. FILTER
L 201 MW OSC
T 221 LW ANT
Q221 LW RF AMP
Q 224 RF SW
LW + B
T201 MW ANT
Q201 MW RF AMP
+ 5 V
IC 251 PLL
17 Eo
16 VDD
15
14 FM OSC IN
13 AM OSC IN FM
12 FM IF IN MW
11 AM IF IN LW
2 - - - 6
8
9
10
TO IC421
LW I+B
MW I+B
FM I+B
+ 12V
C251~253 + B SW
IC 171 MPX
+ B
22 Vcc
17 MONO
1 AM IN
2 FM IN
5 L OUT
8 R OUT
10 FM/AM
AM + B
LP171
L- OUT
R- OUT

Power Supply Section


~
BACK UP TRANS FORMER
D821 ~ D824
VOLTAGE REGULAR Q822
RY 001
POWER TRANS FORMER
SECONDARY CIRCUITS
RELAY DRIVER Q823
FROM IC441

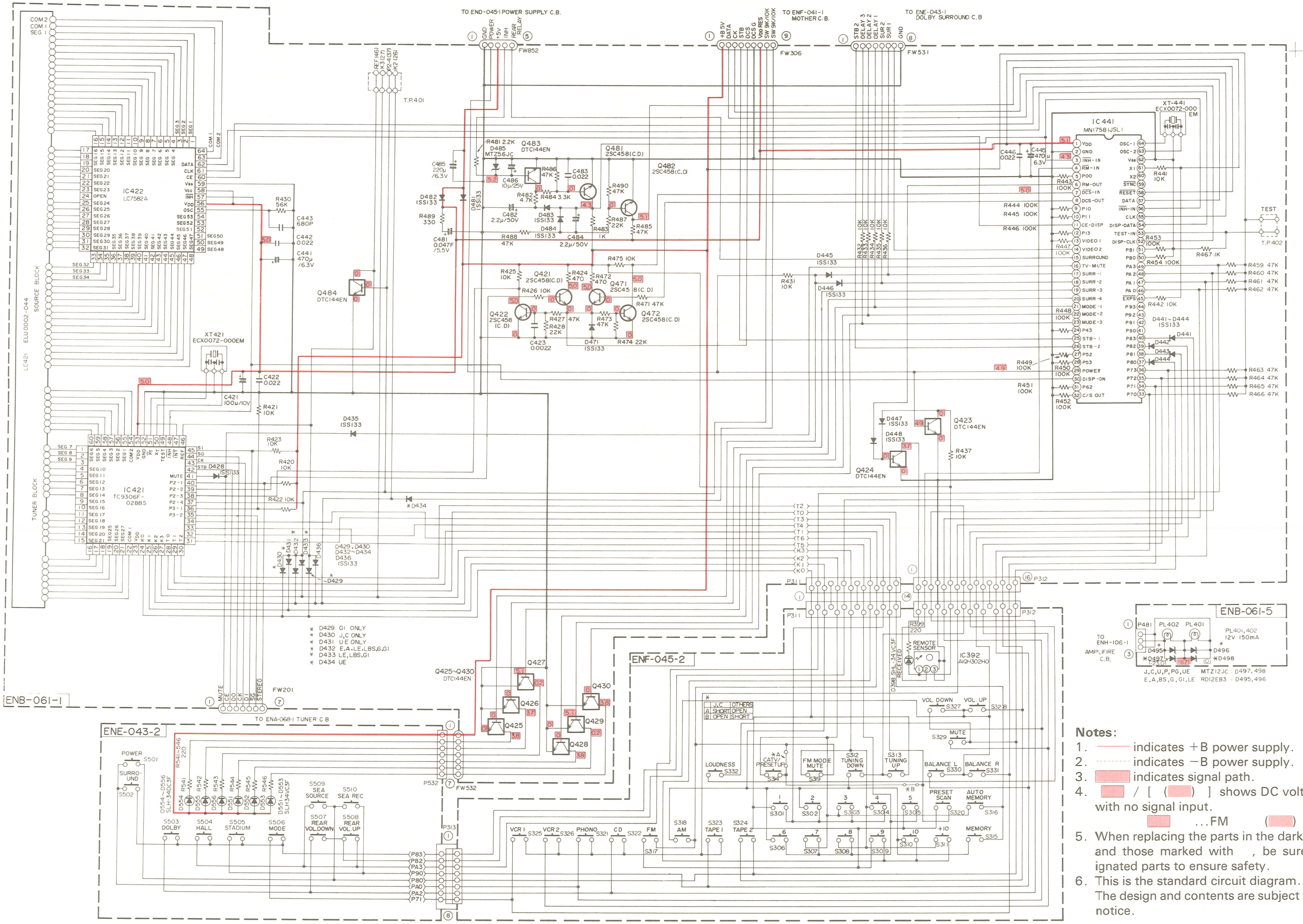
RX-777VBK
RX-777VSBK
RX-777VLBK

Control and Amplifier Section


CLOCK
DATA
STROBE I
STROBE 2
FROM TUNER SECTION
+B -B
IC 301
EQ
PHONO
CD
TAPE 1
PLAY
REC
IC303
TAPE 2
AUDIO VISUAL
IC 302
IC501~IC503
SEA
SURR OUND
IC 391
IC 371
BALANCE
VOL.
LOUDNESS CIRCUIT
IC 372
IC 901
PROTECTOR
FRONT POWER AMPLIFIER
Q761~Q772
SUPER-A
IC 751, IC752
FRONT SPEAKER SELECTOR
SW701
SW702
1
2
HEADPHONE
IC 571
VCR 1
VCR 2
IC 961
PROTECTOR
REAR POWER AMPLIFIER
IC 011
IC 012
IC374
IC 375
REAR SPEAKER TERMINAL
REAR OUT
MUTING Q391, 392
IC 341
SELECTOR Q348~Q350
VIDEO CONTROL
BUFFER Q347
BUFFER Q346
BUFFER Q345
6dB
Q341~344
MONITOR OUT
TO TUNER SECTION
INHIBIT
RESET
SOURCE SW
SEA REC SW
VOLUME, BALANCE
MUTE SW
LOUDNESS SW etc.
VOLTAGE REGULATOR Q801~Q807
FROM POWER TRANSFORMER
IC 392
RECEIVED IC
IC 441 TOTAL CONTROLLER
IC 422 LCD DRIVER
COMPULINK J396 J397
COMPULINK INTER FACE Q471, Q472
TUNER COMPULINK INTERFACE Q421 Q422
I/O
IC 421 TUNER CONTROLLER
FROM TUNER SECTION
35, 40, 41
1~22
54~60
LCD LC421
24~34
42~45
2~5
TUNER CONTROL SW FM, AM, 1cH~10cH UP/DOWN, etc
PLL IC251

(No. 20055)

(3) LCD Control and Front Switch Section

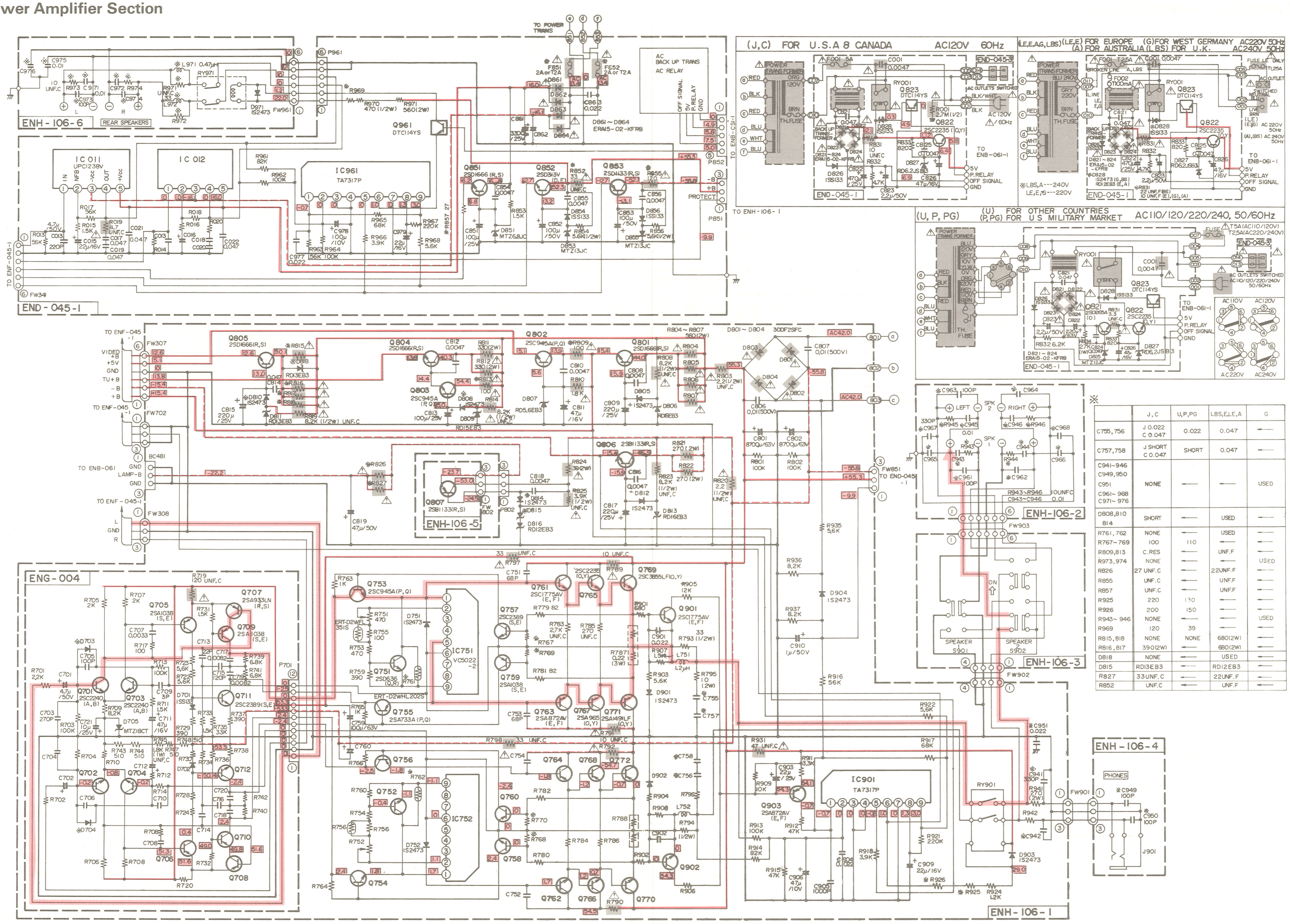

TO END-045-1 POWER SUPPLY C.B.
FW852
TO ENF-041-1 MOTHER C.B.
FW306
TO ENE-043-1 DOLBY SURROUND C.B
FW531
T.P.401
IC441
MN1758IJSL1
XT-441
ECX0072-000EM
IC422
LC7582A
IC421
TC9306F-028BS
XT421
ECX0072-000EM
ELU0002-044
LC421
SOURCE BLOCK
TUNER BLOCK
Q483 DTC144EN
Q481 2SC458(C,D)
Q482 2SC458(C,D)
Q421 2SC458(C,D)
Q422 2SC458 (C,D)
Q471 2SC458(C,D)
Q472 2SC458(C,D)
Q484 DTC144EN
Q423 DTC144EN
Q424 DTC144EN
Q425~Q430 DTC144EN
D429 G1 ONLY
D430 J,C ONLY
D431 UE ONLY
D432 E,A,LE,LBS,G,G1
D433 LE,LBS,G1
D434 UE
TEST
T.P.402
ENB-061-1
FW201
TO ENA-068-1 TUNER C.B
ENE-043-2
ENF-045-2
IC392 AIQH302HO
REMOTE SENSOR
P311
P312
P313
P481
P532
FW532
POWER S501
SURROUND S502
S503 DOLBY
S504 HALL
S505 STADIUM
S506 MODE
S509 SEA SOURCE
S510 SEA REC
S507 REAR VOL DOWN
S508 REAR VOL UP
VOL DOWN S327
VOL UP S328
MUTE S329
LOUDNESS S332
CATV/PRESETUP S34
FM MODE MUTE S39
S312 TUNING DOWN
S313 TUNING UP
BALANCE L S330
BALANCE R S331
PRESET SCAN S320
AUTO MEMORY S316
MEMORY S315
VCR1 S325
VCR2 S326
PHONO S321
CD S322
FM S317
S318 AM
S323 TAPE 1
S324 TAPE 2
ENB-061-5
PL402
PL401
PL401, 402 12V 150mA
TO ENH-106-1 AMPLIFIRE C.B.
D495
D496
D497
D498
J,C,U,P,G,UE MTZ12JC : D497, 498
E,A,BS,G,G1,LE RD12EB3 : D495, 496

Notes:

1. ——— indicates +B power supply.
2. - - - - indicates −B power supply.
3. 🟥 indicates signal path.
4. 🟥 / [(🟥)] shows DC voltage to the chassis with no signal input.
   🟥 ...FM (🟥) ...AM
5. When replacing the parts in the darkened area (▨) and those marked with , be sure to use the designated parts to ensure safety.
6. This is the standard circuit diagram.
   The design and contents are subject to change without notice.

RX-777VBK
RX-777VSBK
RX-777VLBK

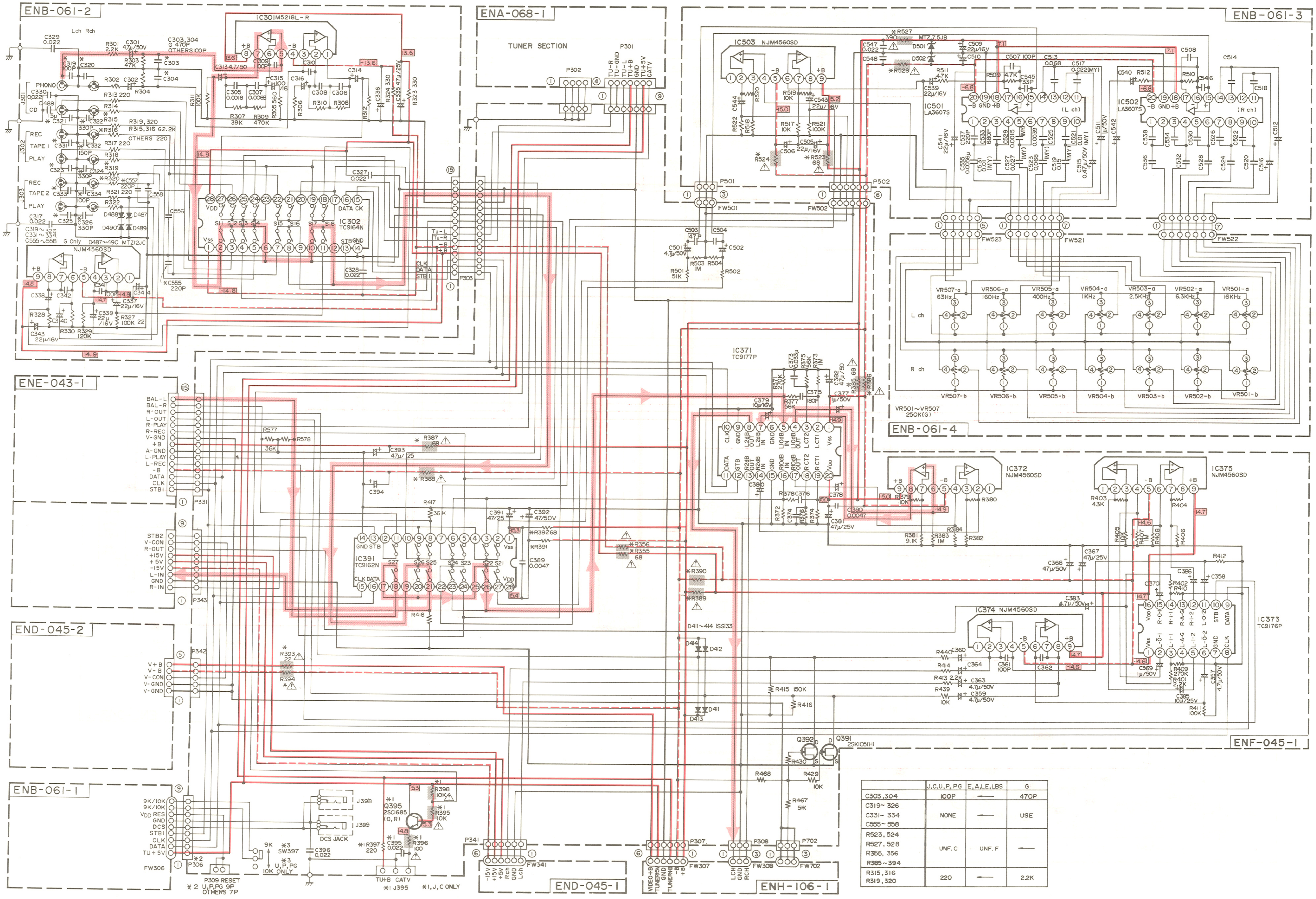
(4) Power Amplifier Section


ENH-106-6
REAR SPEAKERS
FW961
P961
TO POWER TRANS
F851 2A or T2A
F852 2A or T2A
AC BACK UP TRANS
AC RELAY
OFF SIGNAL
5V
P.RELAY
GND
Q961 DTC114YS
IC011 UPC1238V
IC012
IC961 TA7317P
Q851 2SD1666(R,S)
Q852 2SD1313V
Q853 2SD1133(R,S)
D861~D864 ERA15-02-KFRB
PROTECT
P851
P852
TO ENB-061-I
TO ENF-045-1
FW341
END-045-1
(J,C) FOR U.S.A & CANADA AC120V 60Hz
(LE,E,AG,LBS) (LE,E) FOR EUROPE (G) FOR WEST GERMANY AC220V 50Hz
(A) FOR AUSTRALIA (LBS) FOR U.K. AC240V 50Hz
(U,P,PG) (U) FOR OTHER COUNTRIES (P,PG) FOR U S MILITARY MARKET AC110/120/220/240, 50/60Hz
POWER TRANSFORMER
TH.FUSE
RY001
Q822 2SC2235(O,Y)
Q823 DTC114YS
END-045-3
AC OUTLETS SWITCHED
AC110V
AC120V
AC220V
AC240V
TO ENH-106-1
Q805 2SD1666(R,S)
Q804 2SD1666(R,S)
Q803 2SC945A(R,Q)
Q802 2SC945A(P,Q)
Q801 2SD1666(R,S)
D801~D804 30DF2SFC
Q806 2SB1133(R,S)
Q807 2SB1133(R,S)
ENH-106-5
FW307
FW702
FW308
TO ENB-061
LAMP-B
FW851
TO END-045-1
ENG-004
Q701 2SC2240(A,B)
Q702
Q703 2SC2240(A,B)
Q704
Q705 2SA1038(S,E)
Q706
Q707 2SA933LN(R,S)
Q708
Q709 2SA1038(S,E)
Q710
Q711 2SC2389(S,E)
Q712
P701
Q753 2SC945A(P,Q)
Q751 2SD636(Q,R)
Q755 2SA733A(P,Q)
IC751 VC5022-2
IC752
Q757 2SC2389(S,E)
Q759 2SA1038(S,E)
Q761 2SC1775AV(E,F)
Q763 2SA872AV(E,F)
Q765 2SC2235(O,Y)
Q767 2SA965(O,Y)
Q769 2SC3855LF(O,Y)
Q771 2SA1491LF(O,Y)
Q752
Q754
Q756
Q758
Q760
Q762
Q764
Q766
Q768
Q770
Q772
Q901 2SC1775AV(E,F)
Q902
Q903 2SA872AV(E,F)
IC901 TA7317P
RY901
FW901
FW902
FW903
ENH-106-1
ENH-106-2
ENH-106-3
ENH-106-4
LEFT
RIGHT
SPK 1
SPK 2
SPEAKER S901
SPEAKER S902
PHONES
J901

※

	J, C	U,P,PG	LBS,E,LE,A	G
C755, 756	J 0.022 C 0.047	0.022	0.047	←
C757, 758	J SHORT C 0.047	SHORT	0.047	←
C941~946 C949, 950 C951 C961~968 C971~976	NONE	←	←	USED
D808, 810 814	SHORT	←	USED	←
R761, 762	NONE	←	USED	←
R767~769	100	110	←	←
R809, 813	C.RES	←	UNF.F	←
R973, 974	NONE	←	←	USED
R826	27 UNF.C	←	22UNF.F	←
R855	UNF.C	←	UNF.F	←
R857	UNF.C	←	UNF.F	←
R925	220	130	←	←
R926	200	150	←	←
R943~946	NONE	←	←	USED
R969	120	39	←	←
R815, 818	NONE	NONE	680(2W)	←
R816, 817	390(2W)	←	680(2W)	←
D818	NONE	←	USED	←
D815	RD13EB3	←	RD12EB3	←
R827	33UNF.C	←	22UNF.F	←
R852	UNF.C	←	UNF.F	←

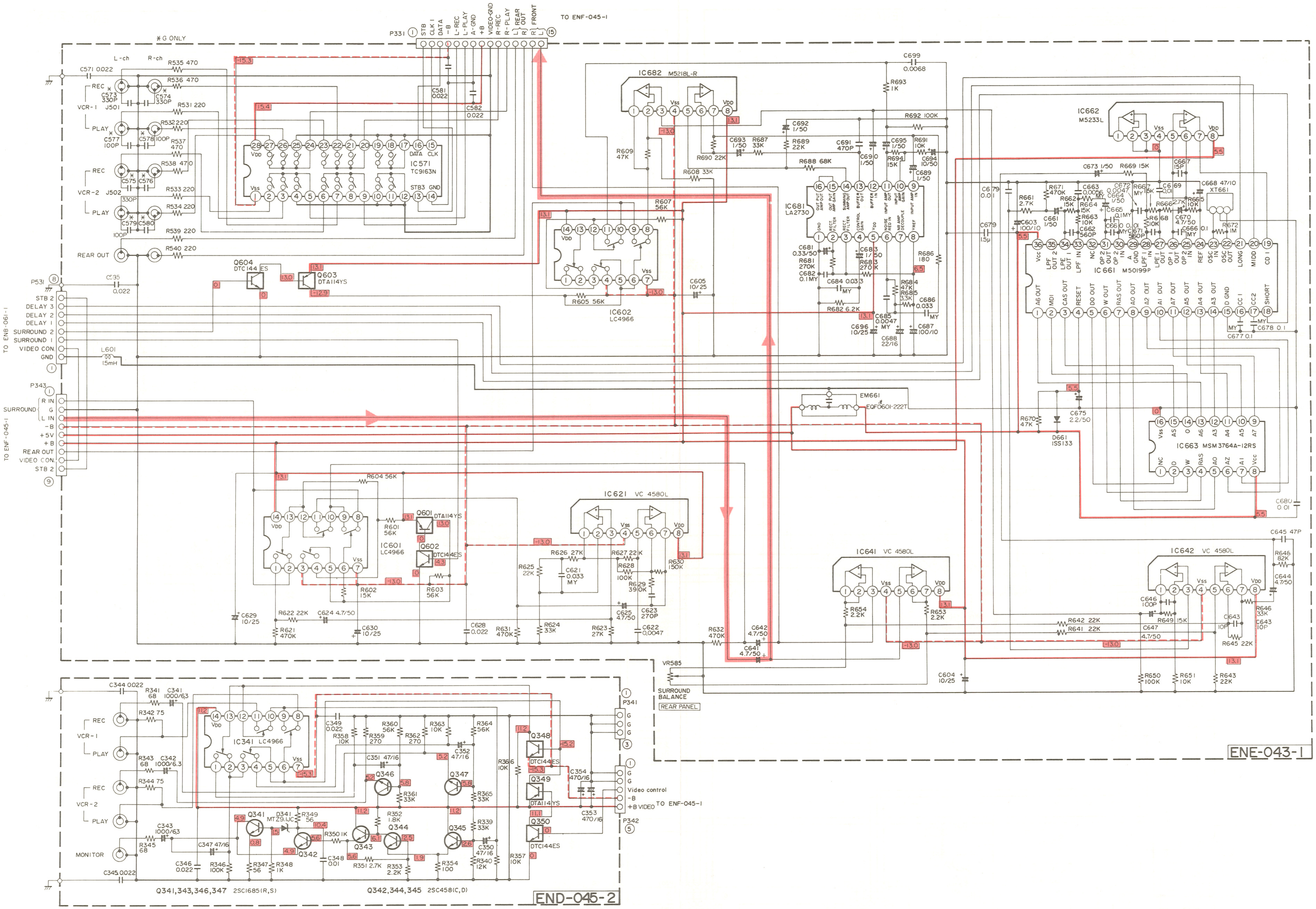
(5) Source Selector and SEA Control Section


ENB-061-2
ENA-068-1
TUNER SECTION
ENB-061-3
ENB-061-4
ENE-043-1
END-045-2
ENB-061-1
END-045-1
ENH-106-1
ENF-045-1
IC301 M5218L-R
IC302 TC9164N
IC503 NJM4560SD
IC501 LA3607S
IC502 LA3607S
IC371 TC9177P
IC372 NJM4560SD
IC375 NJM4560SD
IC391 TC9162N
IC373 TC9176P
IC374 NJM4560SD
Q391 2SK105(H)
Q392
Q395 2SC1685 (Q,R)
D411~414 1SS133
VR507-a 63Hz
VR506-a 160Hz
VR505-a 400Hz
VR504-a 1KHz
VR503-a 2.5KHz
VR502-a 6.3KHz
VR501-a 16KHz
L ch
R ch
VR501~VR507 250K(G)
PHONO
CD
TAPE 1
TAPE 2
REC
PLAY
DCS JACK
P309 RESET
*2 U,P,PG 9P OTHERS 7P
*1 J395
*1,J,C ONLY
*3 U,P,PG 10K ONLY

	J,C,U,P,PG	E,A,LE,LBS	G
C303,304	100P	←	470P
C319~326 C331~334 C555~558	NONE	←	USE
R523,524 R527,528 R355,356 R385~394	UNF.C	UNF.F	←
R315,316 R319,320	220	←	2.2K

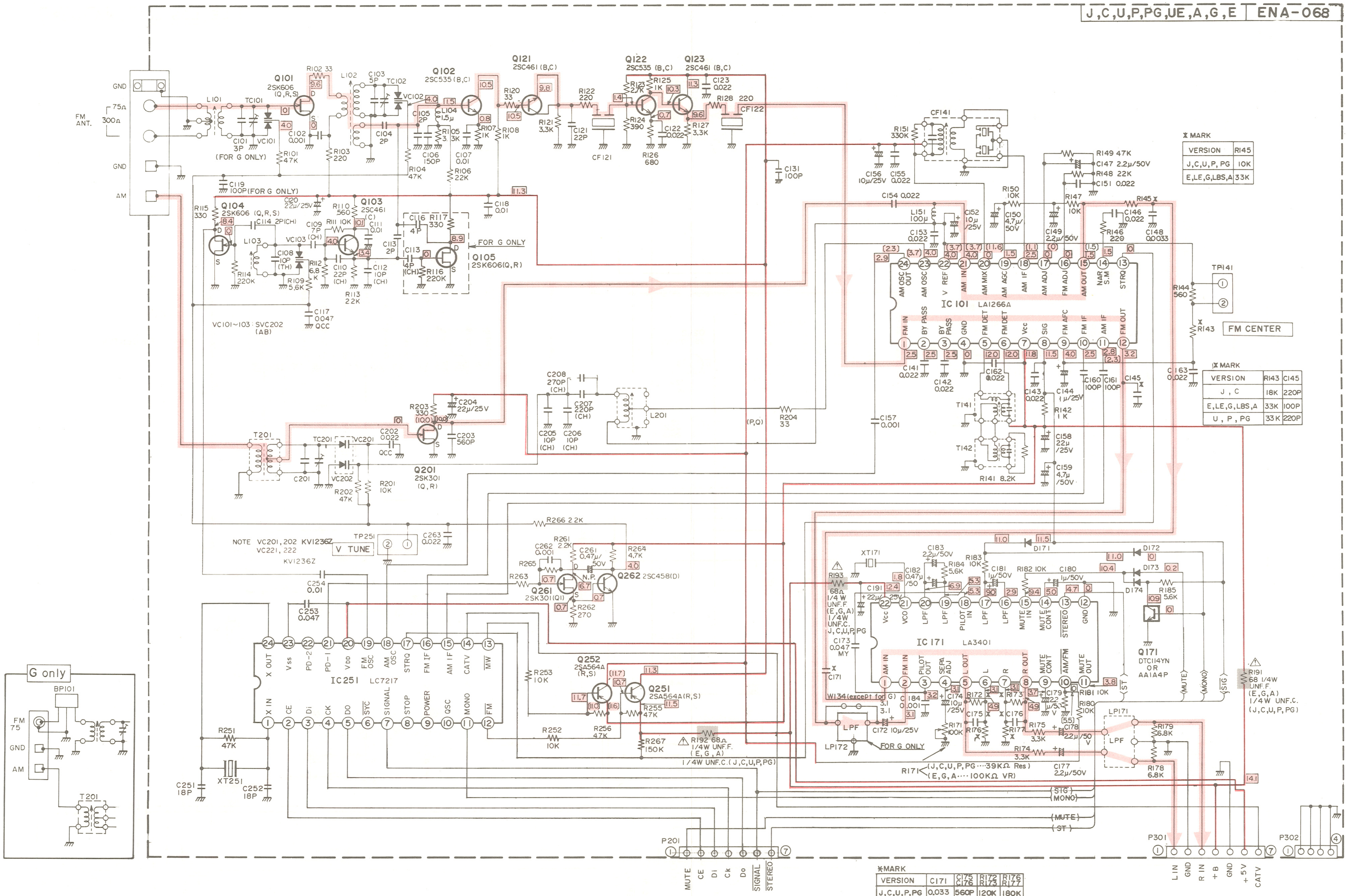
RX-777VBK
RX-777VSBK
RX-777VLBK

(6) Video Selector and Surround Section


P331
STB
CLK I
DATA
-B
L-REC
L-PLAY
A-GND
+B
VIDEO-GND
R-REC
R-PLAY
L REAR
L FRONT
R REAR
R FRONT
TO ENF-045-I
*G ONLY
L-ch
R-ch
REC
VCR-1
J501
PLAY
VCR-2
J502
REAR OUT
IC571
TC9163N
DATA
CLK
STB3
GND
Q604
DTC144ES
Q603
DTA114YS
P531
STB 2
DELAY 3
DELAY 2
DELAY 1
SURROUND 2
SURROUND 1
VIDEO CON.
GND
TO ENB-061-I
L601
15mH
P343
SURROUND
R IN
G
L IN
-B
+5V
+B
REAR OUT
VIDEO CON.
STB 2
TO ENF-045-I
IC682
M5218L-R
IC602
LC4966
IC681
LA2730
IC662
M5233L
IC661
M50199P
XT661
EM661
EQF0601-222T
D661
1SS133
IC663
MSM3764A-12RS
IC601
LC4966
Q601
DTA114YS
Q602
DTC144ES
IC621
VC 4580L
IC641
VC 4580L
IC642
VC 4580L
VR585
SURROUND BALANCE
REAR PANEL
ENE-043-I
IC341
LC4966
Q341
Q342
Q343
Q344
Q345
Q346
Q347
Q348
DTC144ES
Q349
DTA114YS
Q350
DTC144ES
D341
MTZ9.1JC
P341
P342
Video control
+B VIDEO
TO ENF-045-I
REC
VCR-1
PLAY
VCR-2
MONITOR
Q341,343,346,347 2SC1685(R,S)
Q342,344,345 2SC458(C,D)
END-045-2

(No. 20055)

(2) RX-777 VBK, RX-777 VSBK Tuner Section


J,C,U,P,PG,UE,A,G,E
ENA-068
FM ANT. 75Ω 300Ω
GND
AM
Q101 2SK606 (Q,R,S)
Q102 2SC535 (B,C)
Q121 2SC461 (B,C)
Q122 2SC535 (B,C)
Q123 2SC461 (B,C)
Q103 2SC461 (C)
Q104 2SK606 (Q,R,S)
Q105 2SK606 (Q,R)
FOR G ONLY
CF121
CF122
CF141
VC101~103 SVC202 (AB)
Q201 2SK301 (Q,R)
T201
NOTE VC201, 202 KV1236Z
VC221, 222 KV1236Z
TP251 V TUNE
Q261 2SK301 (Q1)
Q262 2SC458 (D)
Q252 2SA564A (R,S)
Q251 2SA564A (R,S)
IC251 LC7217
X OUT
Vss
PD-2
PD-1
VDD
FM OSC
AM OSC
STRQ
FM IF
AM IF
CATV
MW
X IN
CE
Di
CK
DO
SYC
SIGNAL
STOP
POWER
QSC
MONO
FM
XT251
IC101 LA1266A
AM OSC OUT
AM OSC
V REF
AM IN
AM MIX
AM AGC
AM IF
AM ADJ
FM ADJ
AM OUT
NAR S.M
STRQ
FM IN
BY PASS
GND
FM DET
Vcc
SIG
FM AFC
FM IF
AM IF
FM OUT
TP141
FM CENTER
T141
T142
IC171 LA3401
Vcc
VCO
LPF
PILOT IN
MUTE IN
MUTE CONT
STEREO
GND
AM IN
FM IN
PILOT OUT
SEPA ADJ
L OUT
L
R
R OUT
MUTE CONT
AM/FM
MUTE OUT
XT171
Q171 DTC114YN OR AA1A4P
D171
D172
D173
D174
LP171 LPF
LP172 LPF
FOR G ONLY
R171 (J,C,U,P,PG···39KΩ Res) (E,G,A····100KΩ VR)
R191 68 1/4W UNF.F (E,G,A) 1/4W UNF.C. (J,C,U,P,PG)
R192 68Ω 1/4W UNF.F (E,G,A) 1/4W UNF.C.(J,C,U,P,PG)
R193 68Ω 1/4W UNF.F (E,G,A) 1/4W UNF.C. J,C,U,P,PG
W134 (except for G)
SIG
MONO
MUTE
ST
G only
BP101
FM 75
GND
AM
T201
P201
MUTE
CE
DI
Ck
Do
SIGNAL
STEREO
P301
L IN
GND
R IN
+B
GND
+5V
CATV
P302

✱ MARK

VERSION	R145
J,C,U,P, PG	10K
E,LE,G,LBS,A	33K

✱ MARK

VERSION	R143	C145
J , C	18K	220P
E,LE,G,LBS,A	33K	100P
U , P , PG	33K	220P

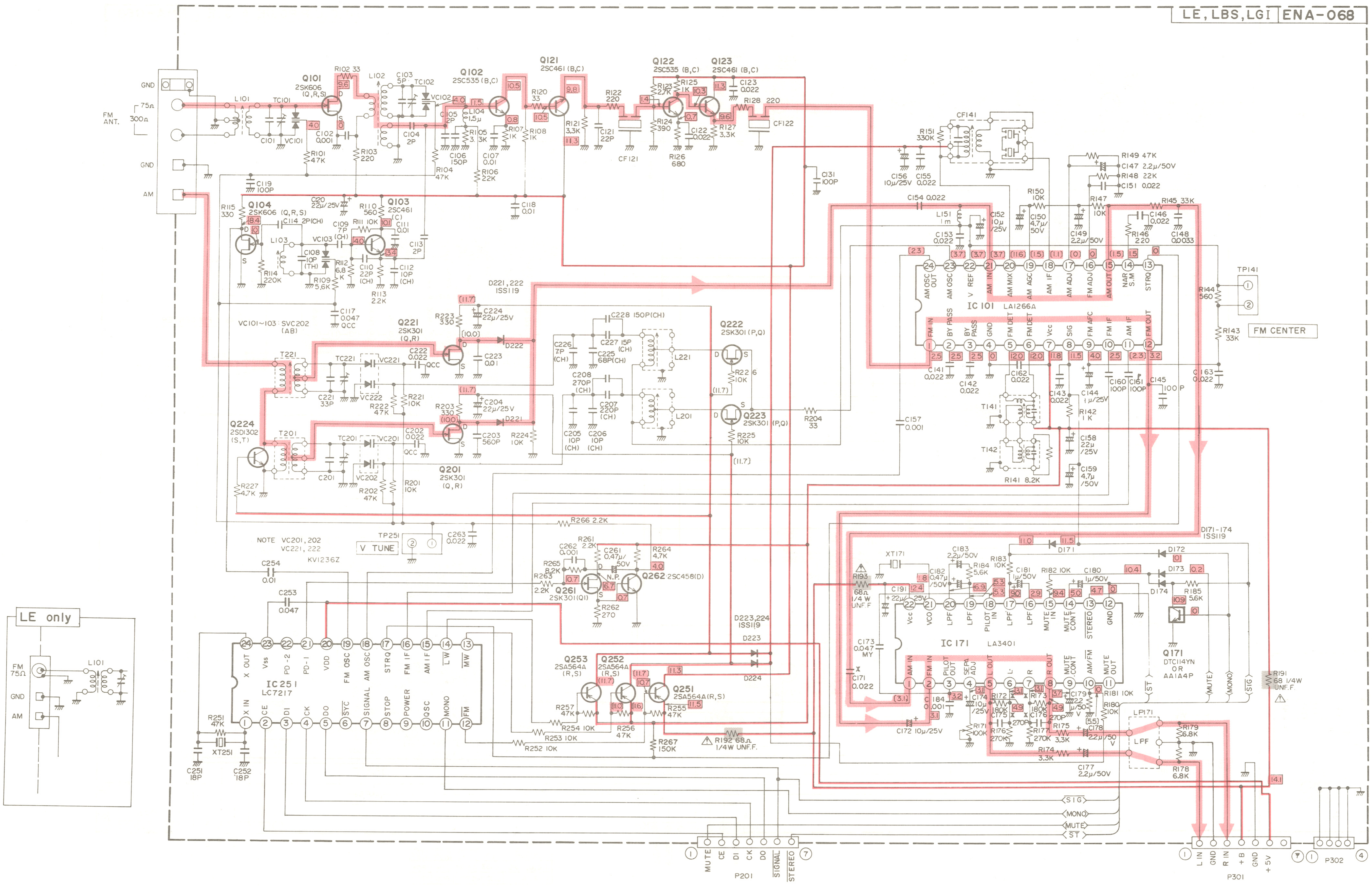
✱MARK

VERSION	C171	C175 C176	R172 R173	R176 R177
J,C,U,P,PG	0.033	560P	120K	180K
E,G,A	0.022	270P	180K	270K

NOTE NON MARK DIODE: ISS119

Schematic Diagrams

(1) RX-777 VLBK Tuner Section


LE, LBS, LGI
ENA-068
FM ANT.
75Ω
300Ω
GND
AM
L101
TC101
C101
VC101
Q101
2SK606 (Q,R,S)
R102 33
R101 47K
C102 0.001
R103 220
L102
C103 5P
TC102
VC102
C104 2P
Q102
2SC535 (B,C)
C105 2P
L104 1.5μ
R105 3.3K
C106 150P
C107 0.01
R104 47K
R106 22K
R107 1K
R108 1K
Q121
2SC461 (B,C)
R120 33
R121 3.3K
C121 22P
R122 220
CF121
Q122
2SC535 (B,C)
Q123
2SC461 (B,C)
R123 2.7K
R125 1K
R124 390
R126 680
C122 0.022
C123 0.022
R128 220
R127 3.3K
CF122
C131 100P
C119 100P
Q104
2SK606 (Q,R,S)
R115 330
C114 2P(CH)
L103
R114 220K
C120 22μ/25V
R110 560
Q103
2SC461 (C)
C109 7P (CH)
R111 10K
VC103
C108 10P (TH)
R112 6.8K
C110 22P (CH)
C111 0.01
C112 10P (CH)
C113 2P
C118 0.01
R109 5.6K
R113 2.2K
C117 0.047 QCC
VC101~103 SVC202 (AB)
D221, 222 1SS119
Q221
2SK301 (Q,R)
R223 330
C224 22μ/25V
C222 0.022
C223 0.01
D222
T221
TC221
VC221
QCC
C221 33P
VC222
R222 47K
R221 10K
C204 22μ/25V
R203 330
D221
C203 560P
R224 10K
Q224
2SD1302 (S,T)
T201
TC201
VC201
C202 0.022 QCC
C201
VC202
R202 47K
R201 10K
Q201
2SK301 (Q,R)
R227 4.7K
C228 150P(CH)
C226 7P (CH)
C227 15P (CH)
C225 68P(CH)
C208 270P (CH)
C207 220P (CH)
C205 10P (CH)
C206 10P (CH)
L221
L201
Q222
2SK301 (P,Q)
R226 10K
Q223
2SK301 (P,Q)
R225 10K
R204 33
R266 2.2K
TP251
V TUNE
C263 0.022
NOTE VC201, 202 VC221, 222 KV1236Z
C254 0.01
C253 0.047
R261 2.2K
C262 0.001
R265 8.2K
R263 2.2K
C261 0.47μ/50V N.P.
R264 4.7K
Q261
2SK301 (Q)
Q262 2SC458(D)
R262 270
IC251
LC7217
X OUT
Vss
PD-2
PD-1
VDD
FM OSC
AM OSC
STRO
FM IF
AM IF
LW
MW
X IN
CE
DI
CK
DO
SYC
SIGNAL
STOP
POWER
OSC
MONO
FM
Q253
2SA564A (R,S)
Q252
2SA564A (R,S)
Q251
2SA564A (R,S)
R257 47K
R255 47K
R254 10K
R256 47K
R253 10K
R252 10K
R267 150K
R192 68Ω 1/4W UNF.F.
D223, 224 1SS119
D223
D224
R251 47K
XT251
C251 18P
C252 18P
LE only
FM 75Ω
GND
AM
L101
CF141
R151 330K
C156 10μ/25V
C155 0.022
C154 0.022
L151 1m
C152 10μ /25V
C153 0.022
C150 4.7μ/50V
R150 10K
R149 47K
C147 2.2μ/50V
R148 22K
C151 0.022
R147 10K
C149 2.2μ/50V
R146 220
C146 0.022
R145 33K
C148 0.0033
IC101 LA1266A
AM OSC OUT
AM OSC
V REF
AM IN
AM MIX
AM AGC
AM IF
AM ADJ
FM ADJ
AM OUT
NAR S.M
STRO
FM IN
BY PASS
BY PASS
GND
FM DET
FM DET
Vcc
SIG
FM AFC
FM IF
AM IF
FM OUT
C141 0.022
C142 0.022
C162 0.022
C143 0.022
C144 1μ/25V
C160 100P
C161 100P
C145 100P
C163 0.022
T141
R142 1K
T142
C158 22μ /25V
C159 4.7μ /50V
R141 8.2K
C157 0.001
TP141
R144 560
R143 33K
FM CENTER
D171-174 1SS119
D171
D172
D173
D174
XT171
C183 2.2μ/50V
R183 10K
R184 5.6K
C181 1μ/50V
R182 10K
C180 1μ/50V
R185 5.6K
R193 68Ω 1/4W UNF.F
C182 0.47μ /50V
C191 22μ/25V
IC171 LA3401
Vcc
VCO
LPF
LPF
PILOT IN
LPF
LPF
MUTE IN
MUTE CONT
STEREO
GND
AM IN
FM IN
PILOT OUT
SEPA ADJ
L OUT
R OUT
MUTE CONT
AM/FM
MUTE OUT
C173 0.047 MY
C171 0.022
C184 0.001
C174 10μ /25V
C175
R172 180K
R173
C176 270P
C179 22μ/50V
R181 10K
R180 10K
R171 100K
R176 270K
R177 270K
R175 3.3K
C178 22μ/50 V
R174 3.3K
C177 2.2μ/50V
C172 10μ/25V
Q171
DTC114YN OR AA1A4P
R191 68 1/4W UNF.F.
LPF171
LPF
R179 6.8K
R178 6.8K
SIG
MONO
MUTE
ST
P201
MUTE
CE
DI
CK
DO
SIGNAL
STEREO
P301
L IN
GND
R IN
+B
GND
+5V
P302

PARTS LIST

Contents

Main Parts Location 2-2
Exploded View and Parts List 2-3
Printed Circuit Board Ass'y and Parts List 2-7
■ ENH-106 ☐ Power Amplifier PC Board Ass'y 2-7
■ END-045 ☐ AC. Rear Amplifier. Video PC Board Ass'y 2-10
■ ENF-045 ☐ Volume. SEA PC Board Ass'y 2-13
■ ENB-061 ☐ LCD Display Tuner Audio Control PC Board Ass'y 2-16
■ ENG-004 ☐ Pre-Drive PC Board Ass'y 2-19
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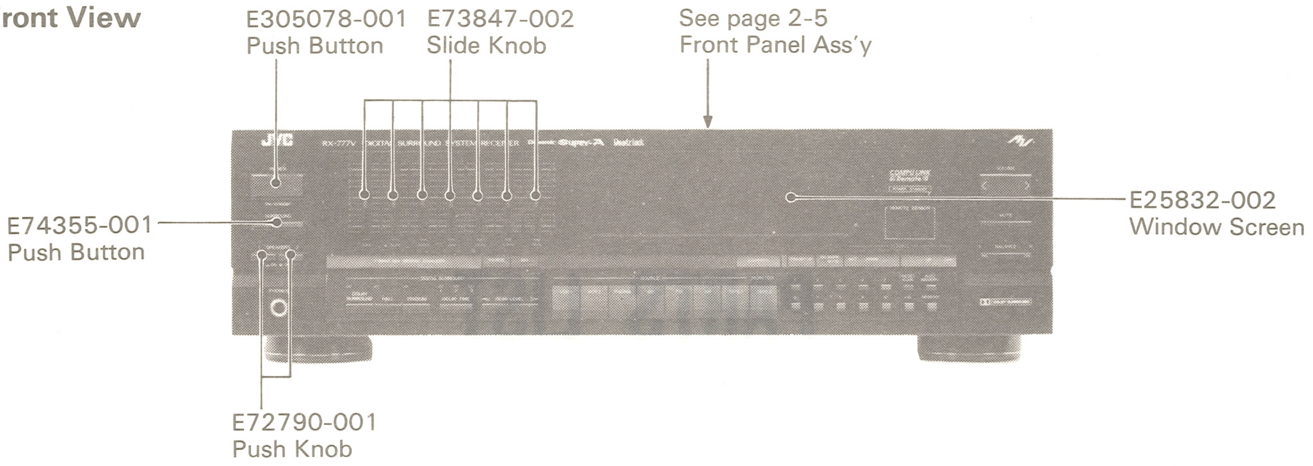
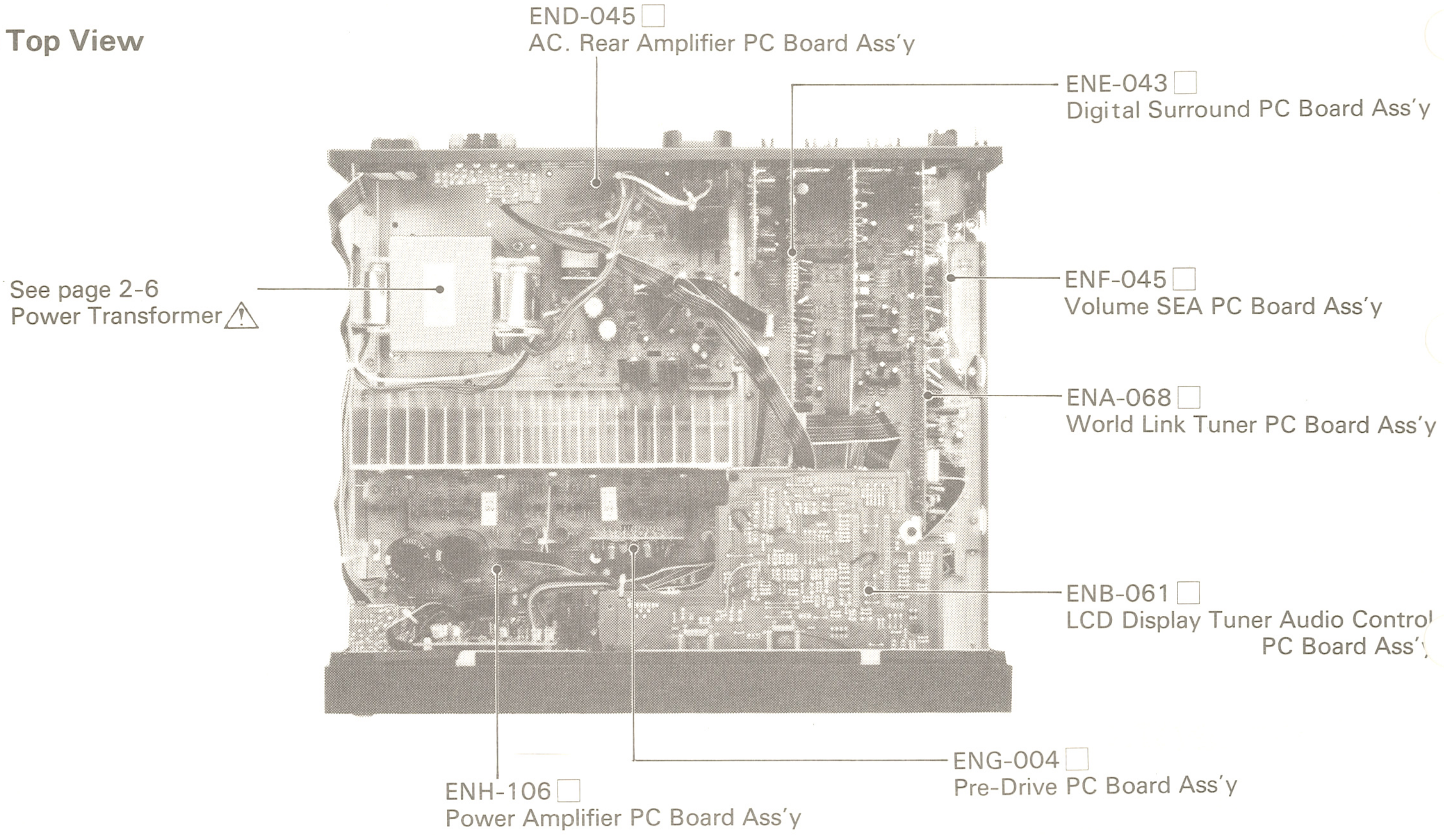
■ ENA-068 ☐ World Link Tuner PC Board Ass'y 2-24
Accessories List 2-28
Packing Materials and Parts Numbers 2-29

Main Parts Location

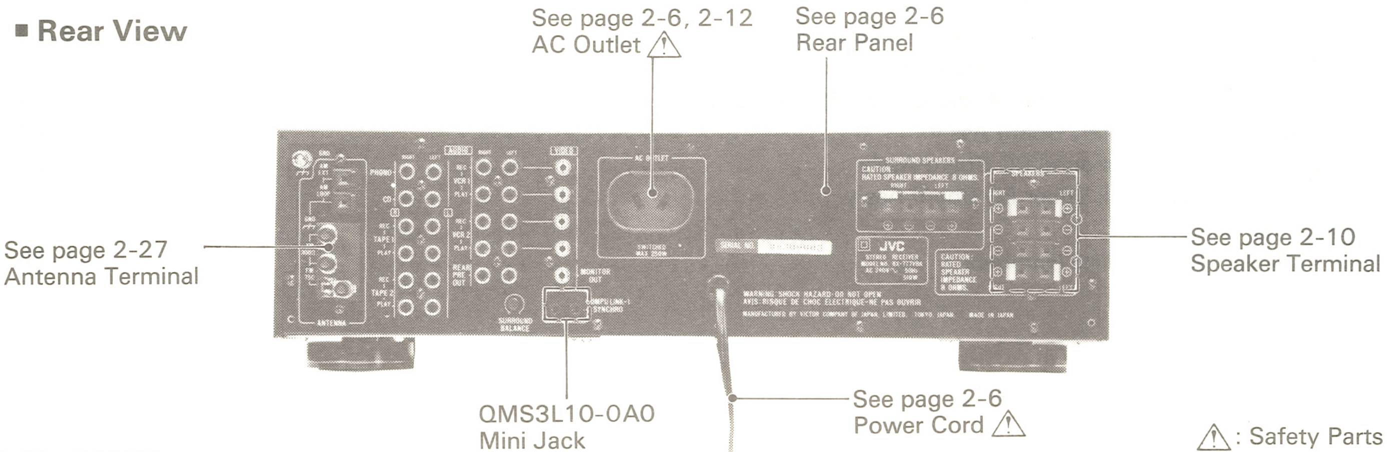
■ Front View


E305078-001
Push Button
E73847-002
Slide Knob
See page 2-5
Front Panel Ass'y
E74355-001
Push Button
E25832-002
Window Screen
E72790-001
Push Knob

■ Top View

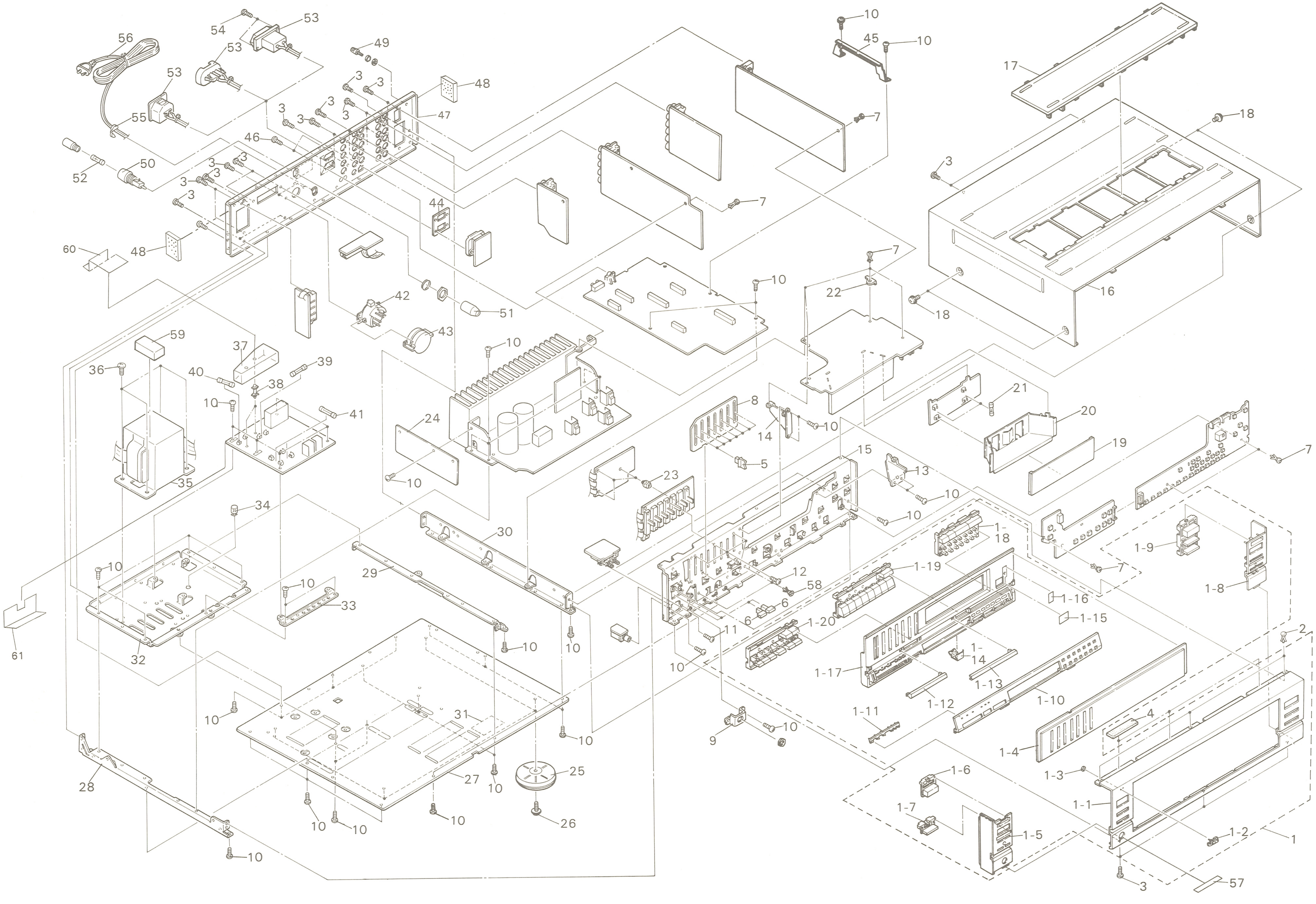

END-045 ☐
AC. Rear Amplifier PC Board Ass'y
ENE-043 ☐
Digital Surround PC Board Ass'y
See page 2-6
Power Transformer ⚠
ENF-045 ☐
Volume SEA PC Board Ass'y
ENA-068 ☐
World Link Tuner PC Board Ass'y
ENB-061 ☐
LCD Display Tuner Audio Control
PC Board Ass'y
ENG-004 ☐
Pre-Drive PC Board Ass'y
ENH-106 ☐
Power Amplifier PC Board Ass'y

■ Rear View


See page 2-6, 2-12
AC Outlet ⚠
See page 2-6
Rear Panel
See page 2-27
Antenna Terminal
See page 2-10
Speaker Terminal
QMS3L10-0A0
Mini Jack
See page 2-6
Power Cord ⚠

⚠ : Safety Parts

Exploded View and Parts List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1-11
31
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9
4
1-4
25
27
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1-3
1-6
28
1-1
1-7
1-2
1
10
10
10
26
1-5
10
3
57

⚠	Item	Part Number	Part Name	Q'ty	Description	Areas
	1	EFP-RX777VBKE	Front Panel Ass'y	1		U, P, PG, E, EF, A, G
		EFP-RX777VBKJ	Front Panel Ass'y	1		J, C, SJ
		EFP-RX777VLBKE	Front Panel Ass'y	1		LE, LEF, LGI, LBS
	1-1	E25827-006	Front Panel	1		Except LE, LEF, LGI, LBS
		E25827-007	Front Panel	1		LE, LEF, LGI, LBS
	1-2	E72968-001	JVC Mark	1		
	1-3	E60912-003	Speed Nut	1		
	1-4	E25832-002	Window Screen	1		
	1-5	E305058-001	Side Escutchion	1	Left	
	1-6	E305078-001	Push Button	1	Power	
	1-7	E74355-001	Push Button	1		
	1-8	E305059-001	Side Escutchion	1	Right	
	1-9	E305056-002	Volume Button	1		
	1-10	E25839-002	Sub Panel	1		
	1-11	E74569-001	Indicator	1		
	1-12	E74566-002	Cap	1	Left	
	1-13	E74568-001	Cap	1	Center	
	1-14	E74883-001	Earth Plate	1		
	1-15	E72436-008	Screen	1		
	1-16	E72437-006	Sheet	1		
	1-17	E11598-005	Front Base	1		
	1-18	E25843-001	Preset Button	1		J, SJ, C
		E25843-002	Preset Button	1		Except J, SJ, C
	1-19	E25830-001	Source Button	1		Except LE, LEF, LGI, LBS
		E25830-002	Source Button	1		LE, LEF, LGI, LBS
	1-20	E25934-002	Push Button	1	Surround	
	2	E48729-009	Plastic Rivet	3		
	3	SBSE3008M	Screw	24		J, SJ, C, G, GI
		SBSE3008M	Screw	25		U, P, PG
		SBSE3008M	Screw	23		E, EF, A, LE, LEF, LBS
	4	EXO050005N25S02	Felt Spacer	3		
	5	E73847-002	Slide Knob	7	Sea	
	6	E72790-001	Push Knob	2	Speaker Switch	
	7	E48729-008	Plastic Rivet	10		
	8	E74451-001	Sheet	1	Sea	
	9	E74448-001	Head Phone Bracket	1		
	10	SBSE3008CC	Screw	45		
	11	SBST3006CC	Screw	2		
	12	E70053-001	Special Screw	5		
	13	E74450-001	Stay Bracket	1	Right	
	14	E73863-001	Stay Bracket	1	Left	
	15	E11597-001	Front Bracket	1		
	16	E25937-002	Metal Cover	1		E, EF, LE, LEF, LGI, LBS
		E25936-004	Metal Cover	1		J, SJ, C, U, P, PG, A, G
	17	E23862-005	Grill	1		E, EF, LE, LEF, LGI, LBS
	18	E61660-004	Special Screw	4		
	19	E73005-005	Sheet	1	Source	
	20	E305054-001	Lamp Holder	1	Source	
	21	ELP4101-003	Fuse Lamp	2	Source PL401,PL402	
	22	E74571-001	Circuit Board Bracket	1		
	23	E305399-001	Fastener	3	Sea	
	24	E73937-001	Sheet	1		
	25	E74522-001	Foot Ass'y	4		
	26	GBST3008CC	Screw	4	Foot	
	27	E11663-001	Bottom Plate	1		
	28	E305234-001	Side Bracket	1	Left	
	29	E305236-001	Center Bracket	1		
	30	E305235-001	Side Bracket	1	Right	
	31	E70115-002	Caution Label	1		Except J, SJ
		E70281-001	Caution Label	1		J, SJ
	32	E25881-001	Trans Bracket	1		
	33	E74570-001	Sub Heat Sink Bracket	1		
	34	E49383-002	Fastener	1		
⚠	35	ETP1150-22JA	Power Transformer	1		J, SJ
⚠		ETP1150-22CA	Power Transformer	1		C

⚠: Safety Parts

⚠	Item	Part Number	Part Name	Q'ty	Description	Areas
⚠		ETP1150-22FA	Power Transformer	1		U, P, PG
⚠		ETP1150-22EA	Power Transformer	1		E, EF, A, G, LE, LEF, LGI
⚠		ETP1150-22EABS	Power Transformer	1		BS
	36	E65389-004	Special Screw	4		
	37	E305445-002	Primary Cover	1		Except J, SJ, C, U, P, PG
	38	E302321-001	Fastener	2		E, EF, A, G
	39	QMF51A2-2R5S	Fuse	1	F001	Except J, SJ, C, P, LBS
		QMF51U1-5R0S	Fuse	1	F001	J, SJ, C, P
		QMF51E2-2R5SBS	Fuse	1	F001	LBS
	40	QMF51A2-R10S	Fuse	1	F002	E, EF, A, G, LE, LEF, LGI
		QMF51E2-R10SBS	Fuse	1	F002	LBS
	41	QMF51A2-2R0S	Fuse	2	F851,F852	Except J, SJ, C, LBS
		QMF51U1-2R0	Fuse	2	F851,F852	J, SJ, C
		QMF51E2-2R0SBS	Fuse	2	F851,F852	LBS
	42	QSR0085-008U	Voltage Selector	1		U, P, PG
	43	E302764-001	Voltage Selector Cover	1		U, P, PG
	44	E69589-008	Spacer	1		J, SJ
	45	E304771-001	Earth Plate	1		
	46	SDSB3008M	Screw	2		J, SJ, C, U, P, PG
	47	E25938-009	Rear Panel	1		J, SJ, C
		E25938-010	Rear Panel	1		U, P, PG
		E25938-011	Rear Panel	1		E, EF
		E25938-012	Rear Panel	1		A
		E25938-013	Rear Panel	1		LE, LEF, LGI
		E25938-014	Rear Panel	1		LBS
		E25938-015	Rear Panel	1		G
	—	E303260-129	Rating Label	1		LE, LEF
	48	EXO085010R10S	Felt Spacer	2		
	49	E70078-001	GND. Terminal	1		
	50	QMG0301-003	Fuse Holder	1		U, P, PG, LE, LEF
	51	E69291-001	Fuse Cover	1		U, P, PG, LE, LEF
⚠	52	QMF51A2-2R5S	Fuse	1	F003	U, PG
⚠		QMF51A2-5R0S	Fuse	1	F003	P
⚠		QMF51A2-1R25S	Fuse	1	F003	LE, LEF
⚠	53	QMC0240-002	AC Outlet	1		E, EF, G, LE, LEF, LGI
⚠		EMC0233-001	AC Outlet	1		A
⚠		EMC0232-001BS	AC Outlet	1		LBS
	54	SBSB3016M	Screw	2		E, EF, G, LE, LEF, LGI
⚠	55	QHS3876-162	Cord Stopper	1		Except BS
⚠		QHS3876-162BS	Cord Stopper	1		BS
⚠	56	QMP1480-200	Power Cord	1		J, SJ, C
⚠		QMP7600-200	Power Cord	1		U, P, PG
⚠		QMP3900-200	Power Cord	1		E, EF, G, LE, LEF, LGI
⚠		QMP2560-244	Power Cord	1		A
⚠		QMP9017-008BS	Power Cord	1		LBS
	57	E49267-001	Origin Marking Label	1		LBS
	58	E48729-007	Plastic Rivet	2		
	59	EXO050025N50S02	Felt Spacer	1		
	60	E74795-001	Shield Plate	1		A, G, E, EF, LE, LEF, LGI
	61	E74919-001	Protect Sheet	1		A, G, E, EF, LE, LEF, LGI

⚠: Safety Parts

The Marks for Designated Areas

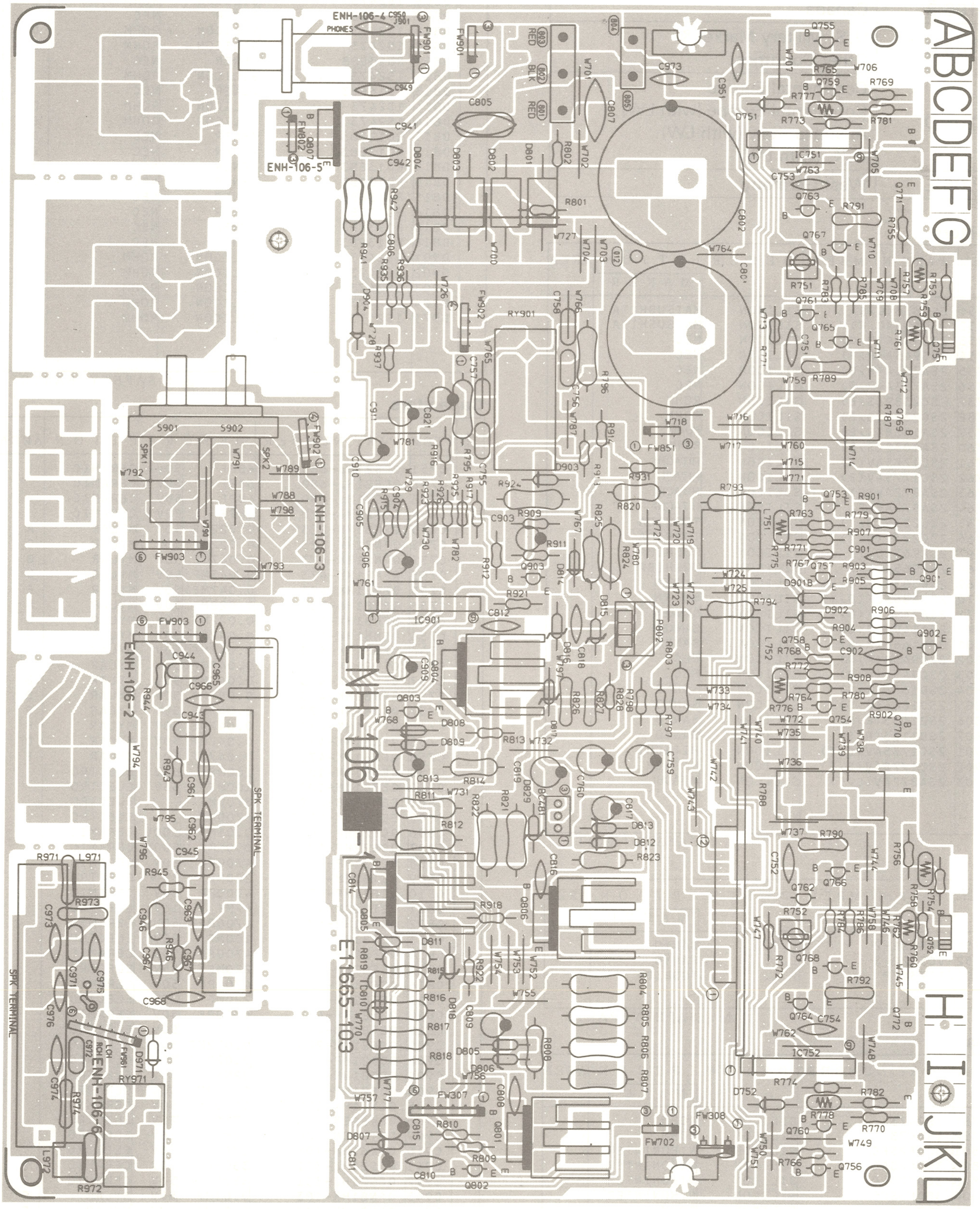
J, SJ··········The U.S.A.
C···············Canada
E, EF··········Continental Europe
A···············Australia
G···············West Germany
P, PG··········U.S. Military Market

LE, LEF··········Continental Europe (with LW)
LBS················U.K. (with LW)
LGI················Italy (with LW)
U···················Other Countries
No mark Indicates all areas.

Printed Circuit Board Ass'y and Parts List

■ ENH-106☐ Power Amplifier PC Board Ass'y

Note: ENH-106☐ varies according to the areas employed. See note (1) when placing an order.


ENH-106
E11665-103
ENH-106-2
ENH-106-3
ENH-106-4
ENH-106-5
ENH-106-6
PHONES
J901
SPK TERMINAL
SPK TERMINAL
SPK1
SPK2
S901
S902
RED
BLK
RED
RY901
RY971
IC751
IC752
IC901
L751
L752
L971
L972
FW901
FW902
FW903
FW308
FW307
FW702
FW851
A
B
C
D
E
F
G
H
I
J
K
L

Note (1)

PC Board Ass'y	Designated Areas
ENH-106 A	U.S.A.
ENH-106 B	Canada
ENH-106 C	U.S. Military Market & Other Countries
ENH-106 D	Continental Europe Continental Europe (with LW), Australia, Italy (with LW), U.K. (with LW)
ENH-106 E	West Germany

Transistors

⚠	ITEM	PART NUMBER	DESCRIPTION	MAKER	AREA
	Q751	2SD636(Q,R)	SILICON	MATSUSHITA	
	Q752	2SD636(Q,R)	SILICON	MATSUSHITA	
	Q753	2SC945A(P,Q)	SILICON	NEC	
	Q754	2SC945A(P,Q)	SILICON	NEC	
	Q755	2SA733A(P,Q)	SILICON	NEC	
	Q756	2SA733A(P,Q)	SILICON	NEC	
	Q757	2SC2389(S,E)	SILICON	ROHM	
	Q758	2SC2389(S,E)	SILICON	ROHM	
	Q759	2SA1038(S,E)	SILICON	ROHM	
	Q760	2SA1038(S,E)	SILICON	ROHM	
	Q761	2SC1775AV(E)	SILICON	HITACHI	
	Q762	2SC1775AV(E)	SILICON	HITACHI	
	Q763	2SA872AV(E)	SILICON	HITACHI	
	Q764	2SA872AV(E)	SILICON	HITACHI	
	Q765	2SC2235(O,Y)	SILICON	TOSHIBA	
	Q766	2SC2235(O,Y)	SILICON	TOSHIBA	
	Q767	2SA965(O,Y)	SILICON	TOSHIBA	
	Q768	2SA965(O,Y)	SILICON	TOSHIBA	
	Q769	2SC3855LF(O,Y)	SILICON	SANKEN	
	Q770	2SC3855LF(O,Y)	SILICON	SANKEN	
	Q771	2SA1491LF(O,Y)	SILICON	SANKEN	
	Q772	2SA1491LF(O,Y)	SILICON	SANKEN	
	Q801	2SD1666(R,S)	SILICON	SANYO	
	Q802	2SC945A(P,Q)	SILICON	NEC	
	Q803	2SC945A(P,Q)	SILICON	NEC	
	Q804	2SD1666(R,S)	SILICON	SANYO	
	Q805	2SD1666(R,S)	SILICON	SANYO	
	Q806	2SB1133(R,S)	SILICON	SANYO	
	Q807	2SB1133(R,S)	SILICON	SANYO	
	Q901	2SC1775AV(E,F)	SILICON	HITACHI	
	Q902	2SC1775AV(E,F)	SILICON	HITACHI	
	Q903	2SA872AV(E,F)	SILICON	HITACHI	

⚠ : SAFETY PARTS

I.C.s

⚠	ITEM	PART NUMBER	DESCRIPTION	MAKER	AREA
	IC751	VC5022-2	I.C.	SANYO	
	IC752	VC5022-2	I.C.	SANYO	
	IC901	TA7317P	I.C.	TOSHIBA	

⚠ : SAFETY PARTS

Diodes

⚠	ITEM	PART NUMBER	DESCRIPTION	MAKER	AREA
	D751	1S2473	SILICON	ROHM	
	D752	1S2473	SILICON	ROHM	
	D801	30DF2SFC	SILICON	NIHONINTER	
	D802	30DF2SFC	SILICON	NIHONINTER	
	D803	30DF2SFC	SILICON	NIHONINTER	
	D804	30DF2SFC	SILICON	NIHONINTER	
	D805	1S2473	SILICON	ROHM	
	D806	RD16EB3	ZENER	NEC	
	D807	RD5.6EB3	ZENER	NEC	
	D808	1S2473	SILICON	ROHM	D
	D808	1S2473	SILICON	ROHM	E
	D809	RD15EB3	ZENER	NEC	
	D810	1S2473	SILICON	ROHM	D
	D810	1S2473	SILICON	ROHM	E
	D811	RD13EB3	ZENER	NEC	
	D812	1S2473	SILICON	ROHM	
	D813	RD16EB3	ZENER	NEC	
	D814	1S2473	SILICON	ROHM	D
	D814	1S2473	SILICON	ROHM	E
	D815	RD12EB3	ZENER	NEC	D
	D815	RD12EB3	ZENER	NEC	E
	D815	RD13EB3	ZENER	NEC	A
	D815	RD13EB3	ZENER	NEC	B
	D815	RD13EB3	ZENER	NEC	C
	D816	RD12EB3	ZENER	NEC	
	D818	RD13EB3	ZENER	NEC	D
	D818	RD13EB3	ZENER	NEC	E
	D901	1S2473	SILICON	ROHM	
	D902	1S2473	SILICON	ROHM	
	D903	1S2473	SILICON	ROHM	
	D904	1S2473	SILICON	ROHM	
	D971	1S2473	SILICON	ROHM	

⚠ : SAFETY PARTS

Capacitors

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
	C751	QCS21HJ-680	68PF	50V	CERAMIC	
	C752	QCS21HJ-680	68PF	50V	CERAMIC	
	C753	QCS21HJ-680	68PF	50V	CERAMIC	
	C754	QCS21HJ-680	68PF	50V	CERAMIC	
	C755	QFN81HK-223	0.022MF	50V	MYLAR	A
	C755	QFN81HK-223	0.022MF	50V	MYLAR	C
	C755	QFN81HK-473	0.047MF	50V	MYLAR	B
	C755	QFN81HK-473	0.047MF	50V	MYLAR	D
	C755	QFN81HK-473	0.047MF	50V	MYLAR	E
	C756	QFN81HK-223	0.022MF	50V	MYLAR	A
	C756	QFN81HK-223	0.022MF	50V	MYLAR	C
	C756	QFN81HK-473	0.047MF	50V	MYLAR	B
	C756	QFN81HK-473	0.047MF	50V	MYLAR	D
	C756	QFN81HK-473	0.047MF	50V	MYLAR	E
	C757	QFN81HK-473	0.047MF	50V	MYLAR	B
	C757	QFN81HK-473	0.047MF	50V	MYLAR	D
	C757	QFN81HK-473	0.047MF	50V	MYLAR	E
	C758	QFN81HK-473	0.047MF	50V	MYLAR	B
	C758	QFN81HK-473	0.047MF	50V	MYLAR	D
	C758	QFN81HK-473	0.047MF	50V	MYLAR	E
	C759	QETB1JM-107	100MF	63V	ELECTRO	
	C760	QETB1JM-107	100MF	63V	ELECTRO	
	C801	EEW6308-878E	8700MF		ELECTRO	
	C802	EEW6308-878E	8700MF		ELECTRO	
	C806	QCE22HP-103	0.01MF	500V	CERAMIC	
	C807	QCE22HP-103	0.01MF	500V	CERAMIC	
	C808	QCF21HP-472	4700PF	50V	CERAMIC	
	C809	QETB1EM-227	220MF	25V	ELECTRO	
	C810	QCF21HP-472	4700PF	50V	CERAMIC	
	C811	QETB1CM-476	47MF	16V	ELECTRO	
	C812	QCF21HP-472	4700PF	50V	CERAMIC	
	C813	QETB1EM-107	100MF	25V	ELECTRO	
	C814	QCF21HP-472	4700PF	50V	CERAMIC	
	C815	QETB1EM-227	220MF	25V	ELECTRO	
	C816	QCF21HP-472	4700PF	50V	CERAMIC	
	C817	QETB1EM-227	220MF	25V	ELECTRO	
	C818	QCF21HP-472	4700PF	50V	CERAMIC	
	C819	QETB1HM-476	47MF	50V	ELECTRO	
	C901	QCF21HP-223	0.022MF	50V	CERAMIC	
	C902	QCF21HP-223	0.022MF	50V	CERAMIC	
	C903	QETB1HM-226	22MF	50V	ELECTRO	
	C904	QCF21HP-223	0.022MF	50V	CERAMIC	
	C905	QCY21HK-102	1000PF	50V	CERAMIC	
	C906	QEK61EM-476	47MF	25V	ELECTRO	
	C909	QETB1CM-226	22MF	16V	ELECTRO	
	C910	QEK61HM-105G	1MF	50V	ELECTRO	
	C941	QCS21HJ-331	330PF	50V	CERAMIC	E
	C942	QCS21HJ-331	330PF	50V	CERAMIC	E
	C943	QFN81HK-103	0.01MF	50V	MYLAR	E
	C944	QFN81HK-103	0.01MF	50V	MYLAR	E
	C945	QFN81HK-103	0.01MF	50V	MYLAR	E
	C946	QFN81HK-103	0.01MF	50V	MYLAR	E
	C949	QCS21HJ-101	100PF	50V	CERAMIC	E
	C950	QCS21HJ-101	100PF	50V	CERAMIC	E
	C951	QCF21HP-223	0.022MF	50V	CERAMIC	E

⚠ : SAFETY PARTS

Capacitors

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
	C961	QCS21HJ-101	100PF	50V	CERAMIC	E
	C962	QCS21HJ-101	100PF	50V	CERAMIC	E
	C963	QCS21HJ-101	100PF	50V	CERAMIC	E
	C964	QCS21HJ-101	100PF	50V	CERAMIC	E
	C965	QCS21HJ-331	330PF	50V	CERAMIC	E
	C966	QCS21HJ-331	330PF	50V	CERAMIC	E
	C967	QCS21HJ-331	330PF	50V	CERAMIC	E
	C968	QCS21HJ-331	330PF	50V	CERAMIC	E
	C971	QFN81HK-103	0.01MF	50V	MYLAR	E
	C972	QFN81HK-103	0.01MF	50V	MYLAR	E
	C973	QCS21HJ-101	100PF	50V	CERAMIC	E
	C974	QCS21HJ-101	100PF	50V	CERAMIC	E
	C975	QCF21HP-103	0.01MF	50V	CERAMIC	E
	C976	QCF21HP-103	0.01MF	50V	CERAMIC	E

⚠ : SAFETY PARTS

Resistors

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
	R751	QVZ3518-471	470	0.1W	VARIABLE	
	R752	QVZ3518-471	470	0.1W	VARIABLE	
	R753	QRD148J-471S	470	1/4W	CARBON	
	R754	QRD148J-471S	470	1/4W	CARBON	
	R755	QRD148J-101S	100	1/4W	CARBON	
	R756	QRD148J-101S	100	1/4W	CARBON	
	R757	ERT-D2WFL351S	350	1/4W	THERMISTOR	
	R758	ERT-D2WFL351S	350	1/4W	THERMISTOR	
	R759	QRD148J-391S	390	1/4W	CARBON	
	R760	QRD148J-391S	390	1/4W	CARBON	
	R761	ERT-D2WHL202S	2K	1/4W	THERMISTOR	D
	R761	ERT-D2WHL202S	2K	1/4W	THERMISTOR	E
	R762	ERT-D2WHL202S	2K	1/4W	THERMISTOR	D
	R762	ERT-D2WHL202S	2K	1/4W	THERMISTOR	E
	R763	QRD148J-102S	1K	1/4W	CARBON	
	R764	QRD148J-102S	1K	1/4W	CARBON	
	R765	QRD148J-102S	1K	1/4W	CARBON	
	R766	QRD148J-102S	1K	1/4W	CARBON	
	R767	QRD148J-820S	82	1/4W	CARBON	
	R768	QRD148J-820S	82	1/4W	CARBON	
	R769	QRD148J-820S	82	1/4W	CARBON	
	R770	QRD148J-820S	82	1/4W	CARBON	
	R779	QRD148J-121S	120	1/4W	CARBON	
	R780	QRD148J-121S	120	1/4W	CARBON	
	R781	QRD148J-121S	120	1/4W	CARBON	
	R782	QRD148J-121S	120	1/4W	CARBON	
⚠	R783	QRD145J-272S	2.7K	1/4W	UNF.CARBON	
⚠	R784	QRD145J-272S	2.7K	1/4W	UNF.CARBON	
⚠	R785	QRD145J-271S	270	1/4W	UNF.CARBON	
⚠	R786	QRD145J-271S	270	1/4W	UNF.CARBON	
⚠	R787	ERF032K-R22	0.22	3W	CEMENT	
⚠	R788	ERF032K-R22	0.22	3W	CEMENT	
⚠	R789	QRD14CJ-100S	10	1/4W	UNF.CARBON	
⚠	R790	QRD14CJ-100S	10	1/4W	UNF.CARBON	
⚠	R791	QRD14CJ-100S	10	1/4W	UNF.CARBON	
⚠	R792	QRD14CJ-100S	10	1/4W	UNF.CARBON	
⚠	R793	QRD125J-330	33	1/2W	UNF.CARBON	
⚠	R794	QRD125J-330	33	1/2W	UNF.CARBON	
⚠	R795	QRG022J-100A	10	2W	O.M.FILM	
⚠	R796	QRG022J-100A	10	2W	O.M.FILM	
⚠	R797	QRD145J-330S	33	1/4W	UNF.CARBON	
⚠	R798	QRD145J-330S	33	1/4W	UNF.CARBON	
	R801	QRD148J-104S	100K	1/4W	CARBON	
	R802	QRD148J-104S	100K	1/4W	CARBON	
⚠	R803	QRD125J-2R2	2.2	1/2W	UNF.CARBON	
⚠	R804	QRG022J-561A	560	2W	O.M.FILM	
⚠	R805	QRG022J-561A	560	2W	O.M.FILM	
⚠	R806	QRG022J-561A	560	2W	O.M.FILM	
⚠	R807	QRG022J-561A	560	2W	O.M.FILM	
⚠	R808	QRD125J-822	8.2K	1/2W	UNF.CARBON	
⚠	R809	QRD145J-101S	100	1/4W	UNF.CARBON	A
⚠	R809	QRD145J-101S	100	1/4W	UNF.CARBON	B
⚠	R809	QRD145J-101S	100	1/4W	UNF.CARBON	C
⚠	R809	QRZ0062-101	100	1/4W	FUSIBLE	D
⚠	R809	QRZ0062-101	100	1/4W	FUSIBLE	E
	R810	QRD148J-182S	1.8K	1/4W	CARBON	
⚠	R811	QRG022J-331A	330	2W	O.M.FILM	A
⚠	R811	QRG022J-331A	330	2W	O.M.FILM	B
⚠	R811	QRG022J-331A	330	2W	O.M.FILM	C
⚠	R811	QRG026J-331AF	330	2W	O.M.FILM	D
⚠	R811	QRG026J-331AF	330	2W	O.M.FILM	E
⚠	R812	QRG022J-331A	330	2W	O.M.FILM	A
⚠	R812	QRG022J-331A	330	2W	O.M.FILM	B
⚠	R812	QRG022J-331A	330	2W	O.M.FILM	C
⚠	R812	QRG026J-331AF	330	2W	O.M.FILM	D

⚠ : SAFETY PARTS

Resistors

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
⚠	R812	QRG026J-331AF	330	2W	O.M.FILM	E
⚠	R813	QRD145J-101S	100	1/4W	UNF.CARBON	A
⚠	R813	QRD145J-101S	100	1/4W	UNF.CARBON	B
⚠	R813	QRD145J-101S	100	1/4W	UNF.CARBON	C
⚠	R813	QRZ0062-101	100	1/4W	FUSIBLE	D
⚠	R813	QRZ0062-101	100	1/4W	FUSIBLE	E
⚠	R814	QRD125J-822	8.2K	1/2W	UNF.CARBON	
⚠	R815	QRG022J-681A	680	2W	O.M.FILM	D
⚠	R815	QRG022J-681A	680	2W	O.M.FILM	E
⚠	R816	QRG022J-391A	390	2W	O.M.FILM	A
⚠	R816	QRG022J-391A	390	2W	O.M.FILM	B
⚠	R816	QRG022J-391A	390	2W	O.M.FILM	C
⚠	R816	QRG022J-681A	680	2W	O.M.FILM	D
⚠	R816	QRG022J-681A	680	2W	O.M.FILM	E
⚠	R817	QRG022J-391A	390	2W	O.M.FILM	A
⚠	R817	QRG022J-391A	390	2W	O.M.FILM	B
⚠	R817	QRG022J-391A	390	2W	O.M.FILM	C
⚠	R817	QRG022J-681A	680	2W	O.M.FILM	D
⚠	R817	QRG022J-681A	680	2W	O.M.FILM	E
⚠	R818	QRG022J-681A	680	2W	O.M.FILM	D
⚠	R818	QRG022J-681A	680	2W	O.M.FILM	E
⚠	R819	QRD125J-822	8.2K	1/2W	UNF.CARBON	
⚠	R820	QRD125J-2R2	2.2	1/2W	UNF.CARBON	
⚠	R821	QRG022J-271A	270	2W	O.M.FILM	
⚠	R822	QRG022J-271A	270	2W	O.M.FILM	
⚠	R823	QRD125J-822	8.2K	1/2W	UNF.CARBON	
⚠	R824	QRG022J-390A	39	2W	O.M.FILM	
⚠	R825	QRD125J-392	3.9K	1/2W	UNF.CARBON	
⚠	R826	QRD14CJ-270S	27	1/4W	UNF.CARBON	A
⚠	R826	QRD14CJ-270S	27	1/4W	UNF.CARBON	B
⚠	R826	QRD14CJ-270S	27	1/4W	UNF.CARBON	C
⚠	R826	QRZ0077-220	22	1/4W	FUSIBLE	D
⚠	R826	QRZ0077-220	22	1/4W	FUSIBLE	E
⚠	R827	QRD14CJ-330S	33	1/4W	UNF.CARBON	A
⚠	R827	QRD14CJ-330S	33	1/4W	UNF.CARBON	B
⚠	R827	QRD14CJ-330S	33	1/4W	UNF.CARBON	C
⚠	R827	QRZ0077-220	22	1/4W	FUSIBLE	D
⚠	R827	QRZ0077-220	22	1/4W	FUSIBLE	E
	R901	QRD148J-681S	680	1/4W	CARBON	
	R902	QRD148J-681S	680	1/4W	CARBON	
	R903	QRD148J-562S	5.6K	1/4W	CARBON	
	R904	QRD148J-562S	5.6K	1/4W	CARBON	
	R905	QRD148J-123S	12K	1/4W	CARBON	
	R906	QRD148J-123S	12K	1/4W	CARBON	
	R907	QRD148J-152S	1.5K	1/4W	CARBON	
	R908	QRD148J-152S	1.5K	1/4W	CARBON	
	R909	QRD148J-103S	10K	1/4W	CARBON	
	R911	QRD148J-332S	3.3K	1/4W	CARBON	
	R912	QRD148J-473S	47K	1/4W	CARBON	
	R913	QRD148J-104S	100K	1/4W	CARBON	
	R914	QRD148J-823S	82K	1/4W	CARBON	
	R915	QRD148J-473S	47K	1/4W	CARBON	
	R916	QRD148J-563S	56K	1/4W	CARBON	
	R917	QRD148J-683S	68K	1/4W	CARBON	
	R918	QRD148J-392S	3.9K	1/4W	CARBON	
	R921	QRD148J-224S	220K	1/4W	CARBON	
	R922	QRD148J-562S	5.6K	1/4W	CARBON	
⚠	R924	QRG022J-122A	1.2K	2W	O.M.FILM	
	R925	QRD148J-131S	130	1/4W	CARBON	C
	R925	QRD148J-131S	130	1/4W	CARBON	D
	R925	QRD148J-131S	130	1/4W	CARBON	E
	R925	QRD148J-221S	220	1/4W	CARBON	A
	R925	QRD148J-221S	220	1/4W	CARBON	B
	R926	QRD148J-151S	150	1/4W	CARBON	C
	R926	QRD148J-151S	150	1/4W	CARBON	D
	R926	QRD148J-151S	150	1/4W	CARBON	E
	R926	QRD148J-201S	200	1/4W	CARBON	A
	R926	QRD148J-201S	200	1/4W	CARBON	B
⚠	R931	QRD145J-470S	47	1/4W	UNF.CARBON	
	R935	QRD148J-562S	5.6K	1/4W	CARBON	
	R936	QRD148J-822S	8.2K	1/4W	CARBON	
	R937	QRD148J-822S	8.2K	1/4W	CARBON	
⚠	R941	QRG022J-271A	270	2W	O.M.FILM	
⚠	R942	QRG022J-271A	270	2W	O.M.FILM	
⚠	R943	QRD145J-100S	10	1/4W	UNF.CARBON	E
⚠	R944	QRD145J-100S	10	1/4W	UNF.CARBON	E
⚠	R945	QRD145J-100S	10	1/4W	UNF.CARBON	E
⚠	R946	QRD145J-100S	10	1/4W	UNF.CARBON	E
⚠	R971	QRD14CJ-330S	33	1/4W	UNF.CARBON	
⚠	R972	QRD14CJ-330S	33	1/4W	UNF.CARBON	
⚠	R973	QRD14CJ-100S	10	1/4W	UNF.CARBON	E
⚠	R974	QRD14CJ-100S	10	1/4W	UNF.CARBON	E

⚠ : SAFETY PARTS

Others

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
		EMB90TV-801A	SPEAKER TERMINAL	
		EMB90YV-401A	SPEAKER TERMINAL	
		E11665-103	CIRCUIT BOARD	A
		E11665-103	CIRCUIT BOARD	B
		E11665-103	CIRCUIT BOARD	C
		E11665-103	CIRCUIT BOARD	D
		E11665-103	CIRCUIT BOARD	E
		E304655-003	HEAT SINK	
		E305265-001	BRACKET	
		E305266-001	BRACKET	
		E65654-001	SPACER	D
		E65654-001	SPACER	E
		E67764-103	WRAPPING TERMINAL	
		E70225-001	EARTH PLATE	E
		E70859-001	EARTH PLATE	
		E70945-H25B	HEAT SINK	
		E70945-H25B	HEAT SINK	
		E70945-H25B	HEAT SINK	
		E70945-H25B	HEAT SINK	
		E73525-001	SCREW	
		SBSB3012CC	SCREW	
		SBSB3012CC	SCREW	
		SBSB3012CC	SCREW	
		SBSB3012CC	SCREW	
		SBSB3012CC	SCREW	
		SBSE3008CC	SCREW	
	J901	QMS6A40-021	HEADPHONE JACK	
	L751	EQL0101-1R2	INDUCTOR	
	L752	EQL0101-1R2	INDUCTOR	
	L971	EQL0001-R45	INDUCTOR	

⚠ : SAFETY PARTS

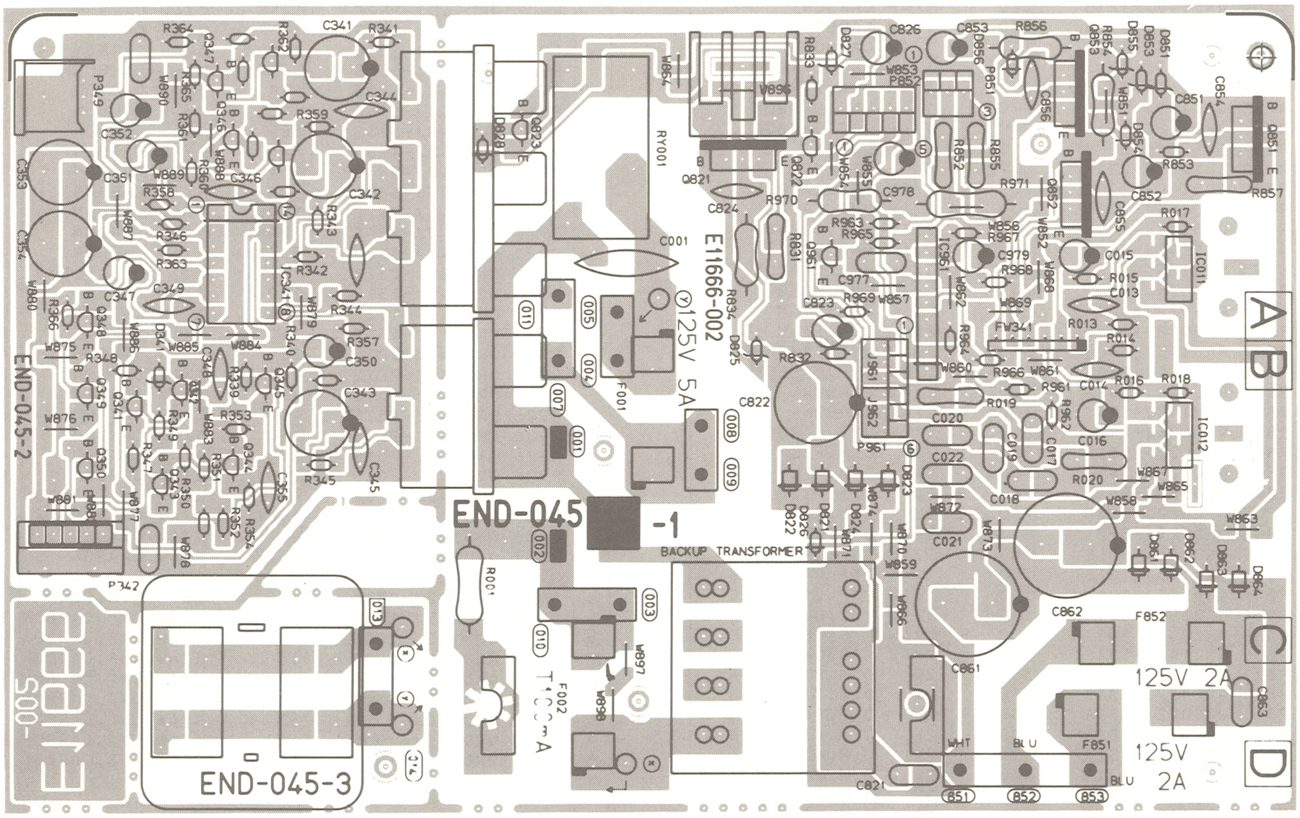
Others

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
	L972	EQL0001-R45	INDUCTOR	
	P339	EWS013-257	SOCKET WIRE	
	P802	EMV7112-003	CONNECTOR	
	S901	QST4231-E01	PUSH SWITCH	
	BC481	EWS013-242	SOCKET WIRE	
	FW307	EWR36B-25KST	FLAT WIRE	
	FW308	EWR23C-30JN	FLAT WIRE	
	FW702	EWR33B-35LST	FLAT WIRE	
	FW802	EWR33B-13KST	FLAT WIRE	
	FW851	EWR33B-55LST	FLAT WIRE	
	FW901	EWR33B-08SST	FLAT WIRE	
	FW902	EWR34B-16SST	FLAT WIRE	
	FW903	EWR36B-35SST	FLAT WIRE	
	FW961	EWR36B-20LST	FLAT WIRE	
	RY901	ESK5D24-218	RELAY	
	RY971	ESK8D24-212	RELAY	

⚠ : SAFETY PARTS

■ END-045☐ AC. Rear Amplifier. Video PC Board Ass'y

Note: END-045☐ varies according to the areas employed. See note (1) when placing an order.



Note (1)

PC Board Ass'y	Designated Areas
END-045 A	U.S.A.
END-045 B	Canada
END-045 C	U.S. Military Market & Other Countries
END-045 D	Continental Europe, Italy (with LW), Continental Europe (with LW)
END-045 E BS	U.K. (with LW)
END-045 F	Australia
END-045 G	West Germany

Transistors

⚠	ITEM	PART NUMBER	DESCRIPTION		AREA
				MAKER	
	Q341	2SC1685(R,S)	SILICON	MATSUSHITA	
	Q342	2SC458(C,D)	SILICON	HITACHI	
	Q343	2SC1685(R,S)	SILICON	MATSUSHITA	
	Q344	2SC458(C,D)	SILICON	HITACHI	
	Q345	2SC458(C,D)	SILICON	HITACHI	
	Q346	2SC1685(R,S)	SILICON	MATSUSHITA	
	Q347	2SC1685(R,S)	SILICON	MATSUSHITA	
	Q348	DTC144ES	SILICON	ROHM	
	Q349	DTA114YS	SILICON	ROHM	
	Q350	DTC144ES	SILICON	ROHM	
	Q821	2SD1265A(O)	SILICON	MATSUSHITA	C
	Q822	2SC2235(O,Y)	SILICON	TOSHIBA	
	Q823	DTC114YS	SILICON	ROHM	
	Q851	2SD1666(R,S)	SILICON	SANYO	
	Q852	2SD313V(D,E)	SILICON	SANYO	
	Q853	2SB1133(R,S)	SILICON	SANYO	
	Q961	DTC114YS	SILICON	ROHM	

⚠ : SAFETY PARTS

I.C.s

⚠	ITEM	PART NUMBER	DESCRIPTION		AREA
				MAKER	
	IC011	UPC1238V1	I.C.	NEC	
	IC012	UPC1238V1	I.C.	NEC	
	IC341	LC4966	I.C.	SANYO	
	IC961	TA7317P	I.C.	TOSHIBA	

⚠ : SAFETY PARTS

Diodes

⚠	ITEM	PART NUMBER	DESCRIPTION		AREA
				MAKER	
	D341	MTZ9.1JC	ZENER	ROHM	
	D821	ERA15-02L19	SILICON	FUJIDENKI	
	D822	ERA15-02L19	SILICON	FUJIDENKI	
	D823	ERA15-02L19	SILICON	FUJIDENKI	
	D824	ERA15-02L19	SILICON	FUJIDENKI	
	D825	MTZ12JC	ZENER	ROHM	C
	D826	1SS133	SILICON	ROHM	
	D827	RD6.2JSB3	ZENER	NEC	
	D828	1SS133	SILICON	ROHM	
	D851	MTZ6.8JC	ZENER	ROHM	
	D853	MTZ24JC	ZENER	ROHM	
	D854	1SS133	SILICON	ROHM	
	D855	MTZ13JC	ZENER	ROHM	
	D856	1SS133	SILICON	ROHM	
	D861	ERA15-02L19	SILICON	FUJIDENKI	
	D862	ERA15-02L19	SILICON	FUJIDENKI	
	D863	ERA15-02L19	SILICON	FUJIDENKI	
	D864	ERA15-02L19	SILICON	FUJIDENKI	

⚠ : SAFETY PARTS

Capacitors

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
	C001	QCZ9019-472	4700PF		CERAMIC	A
	C001	QCZ9019-472	4700PF		CERAMIC	B
	C001	QCZ9019-472	4700PF		CERAMIC	C
	C001	QCZ9019-472	4700PF		CERAMIC	D
	C001	QCZ9019-472	4700PF		CERAMIC	F
	C001	QCZ9019-472	4700PF		CERAMIC	G
	C001	QCZ9019-472BS	4700PF		CERAMIC	EBS
	C013	QCS21HJ-221	220PF	50V	CERAMIC	
	C014	QCS21HJ-221	220PF	50V	CERAMIC	
	C015	QEHC1CM-226	22MF	16V	ELECTRO	
	C016	QEHC1CM-226	22MF	16V	ELECTRO	
	C017	QFN81HK-473	0.047MF	50V	MYLAR	
	C018	QFN81HK-473	0.047MF	50V	MYLAR	
	C019	QFN81HK-473	0.047MF	50V	MYLAR	
	C020	QFN81HK-473	0.047MF	50V	MYLAR	
	C021	QFN81HK-473	0.047MF	50V	MYLAR	
	C022	QFN81HK-473	0.047MF	50V	MYLAR	
	C341	QETB0JM-108	1000MF	6.3V	ELECTRO	
	C342	QETB0JM-108	1000MF	6.3V	ELECTRO	
	C343	QETB0JM-108	1000MF	6.3V	ELECTRO	
	C344	QCF21HP-223	0.022MF	50V	CERAMIC	
	C345	QCF21HP-223	0.022MF	50V	CERAMIC	
	C346	QCF21HP-223	0.022MF	50V	CERAMIC	
	C347	QETB1CM-476	47MF	16V	ELECTRO	
	C348	QCF21HP-103	0.01MF	50V	CERAMIC	
	C349	QCF21HP-223	0.022MF	50V	CERAMIC	
	C350	QETB1CM-476	47MF	16V	ELECTRO	
	C351	QETB1CM-476	47MF	16V	ELECTRO	
	C352	QETB1CM-476	47MF	16V	ELECTRO	
	C353	QETB1CM-477	470MF	16V	ELECTRO	
	C354	QETB1CM-477	470MF	16V	ELECTRO	
	C821	QFN32AK-473	0.047MF	100V	MYLAR	
	C822	QETB1EM-477	470MF	25V	ELECTRO	A
	C822	QETB1EM-477	470MF	25V	ELECTRO	B
	C822	QETB1EM-477	470MF	25V	ELECTRO	D
	C822	QETB1EM-477	470MF	25V	ELECTRO	EBS
	C822	QETB1EM-477	470MF	25V	ELECTRO	F
	C822	QETB1EM-477	470MF	25V	ELECTRO	G
	C822	QETB1JM-227	220MF	63V	ELECTRO	C
	C823	QETB1HM-225	2.2MF	50V	ELECTRO	
	C824	QCF21HP-472	4700PF	50V	CERAMIC	C
	C826	QETB1CM-476	47MF	16V	ELECTRO	
	C851	QEHC1EM-107	100MF	25V	ELECTRO	
	C852	QEHC1HM-107	100MF	50V	ELECTRO	
	C853	QETB1HM-107	100MF	50V	ELECTRO	
	C854	QCF21HP-472	4700PF	50V	CERAMIC	
	C855	QCF21HP-472	4700PF	50V	CERAMIC	
	C856	QCF21HP-472	4700PF	50V	CERAMIC	
	C861	QETB1EM-338	3300MF	25V	ELECTRO	
	C862	QETB1EM-338	3300MF	25V	ELECTRO	
	C863	QFN81HK-223	0.022MF	50V	MYLAR	
	C977	QFN81HK-223	0.022MF	50V	MYLAR	
	C978	QETB1AM-107	100MF	10V	ELECTRO	
	C979	QETB1CM-226	22MF	16V	ELECTRO	

⚠ : SAFETY PARTS

Resistors

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
⚠	R001	QRC128K-275EM	2.7M	1/2W	COMPOSI	A
⚠	R001	QRC128K-275EM	2.7M	1/2W	COMPOSI	B
	R013	QRD167J-563	56K	1/6W	CARBON	
	R014	QRD167J-563	56K	1/6W	CARBON	
	R015	QRD167J-152	1.5K	1/6W	CARBON	
	R016	QRD167J-152	1.5K	1/6W	CARBON	
	R017	QRD167J-563	56K	1/6W	CARBON	
	R018	QRD167J-563	56K	1/6W	CARBON	
⚠	R019	QRD14CJ-4R7S	4.7	1/4W	UNF.CARBON	
⚠	R020	QRD14CJ-4R7S	4.7	1/4W	UNF.CARBON	
	R339	QRD167J-333	33K	1/6W	CARBON	
	R340	QRD167J-123	12K	1/6W	CARBON	
	R341	QRD167J-680	68	1/6W	CARBON	
	R342	QRD167J-750	75	1/6W	CARBON	
	R343	QRD167J-680	68	1/6W	CARBON	
	R344	QRD167J-750	75	1/6W	CARBON	
	R345	QRD167J-680	68	1/6W	CARBON	
	R346	QRD167J-104	100K	1/6W	CARBON	
	R347	QRD167J-560	56	1/6W	CARBON	
	R348	QRD167J-102	1K	1/6W	CARBON	

⚠ : SAFETY PARTS

Resistors

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
	R349	QRD167J-560	56	1/6W	CARBON	
	R350	QRD167J-102	1K	1/6W	CARBON	
	R351	QRD167J-272	2.7K	1/6W	CARBON	
	R352	QRD167J-182	1.8K	1/6W	CARBON	
	R353	QRD167J-222	2.2K	1/6W	CARBON	
	R354	QRD167J-101	100	1/6W	CARBON	
	R357	QRD167J-103	10K	1/6W	CARBON	
	R358	QRD167J-103	10K	1/6W	CARBON	
	R359	QRD167J-271	270	1/6W	CARBON	
	R360	QRD167J-563	56K	1/6W	CARBON	
	R361	QRD167J-333	33K	1/6W	CARBON	
	R362	QRD167J-271	270	1/6W	CARBON	
	R363	QRD167J-103	10K	1/6W	CARBON	
	R364	QRD167J-563	56K	1/6W	CARBON	
	R365	QRD167J-333	33K	1/6W	CARBON	
	R366	QRD167J-103	10K	1/6W	CARBON	
⚠	R831	QRD14CJ-100S	10	1/4W	UNF.CARBON	A
⚠	R831	QRD14CJ-100S	10	1/4W	UNF.CARBON	B
⚠	R831	QRD14CJ-3R3S	3.3	1/4W	UNF.CARBON	C
⚠	R831	QRZ0077-100	10	1/4W	FUSIBLE	D
⚠	R831	QRZ0077-100	10	1/4W	FUSIBLE	G
⚠	R831	QRZ0077-220	22	1/4W	FUSIBLE	EBS
⚠	R831	QRZ0077-220	22	1/4W	FUSIBLE	F
	R832	QRD167J-472	4.7K	1/6W	CARBON	A
	R832	QRD167J-472	4.7K	1/6W	CARBON	B
	R832	QRD167J-472	4.7K	1/6W	CARBON	D
	R832	QRD167J-472	4.7K	1/6W	CARBON	EBS
	R832	QRD167J-472	4.7K	1/6W	CARBON	F
	R832	QRD167J-472	4.7K	1/6W	CARBON	G
	R832	QRD167J-622	6.2K	1/6W	CARBON	C
	R833	QRD167J-821	820	1/6W	CARBON	
⚠	R834	QRG012J-272A	2.7K	1W	O.M.FILM	C
⚠	R852	QRD14CJ-330S	33	1/4W	UNF.CARBON	A
⚠	R852	QRD14CJ-330S	33	1/4W	UNF.CARBON	B
⚠	R852	QRD14CJ-330S	33	1/4W	UNF.CARBON	C
⚠	R852	QRZ0077-330	33	1/4W	FUSIBLE	D
⚠	R852	QRZ0077-330	33	1/4W	FUSIBLE	EBS
⚠	R852	QRZ0077-330	33	1/4W	FUSIBLE	F
⚠	R852	QRZ0077-330	33	1/4W	FUSIBLE	G
	R853	QRD167J-152	1.5K	1/6W	CARBON	
⚠	R854	QRD125J-562	5.6K	1/2W	UNF.CARBON	
⚠	R855	QRD14CJ-121S	120	1/4W	UNF.CARBON	A
⚠	R855	QRD14CJ-121S	120	1/4W	UNF.CARBON	B
⚠	R855	QRD14CJ-121S	120	1/4W	UNF.CARBON	C
⚠	R855	QRZ0077-121	120	1/4W	FUSIBLE	D
⚠	R855	QRZ0077-121	120	1/4W	FUSIBLE	EBS
⚠	R855	QRZ0077-121	120	1/4W	FUSIBLE	F
⚠	R855	QRZ0077-121	120	1/4W	FUSIBLE	G
⚠	R856	QRD125J-562	5.6K	1/2W	UNF.CARBON	
⚠	R857	QRD14CJ-270S	27	1/4W	UNF.CARBON	A
⚠	R857	QRD14CJ-270S	27	1/4W	UNF.CARBON	B
⚠	R857	QRD14CJ-270S	27	1/4W	UNF.CARBON	C
⚠	R857	QRZ0077-270	27	1/4W	FUSIBLE	D
⚠	R857	QRZ0077-270	27	1/4W	FUSIBLE	EBS
⚠	R857	QRZ0077-270	27	1/4W	FUSIBLE	F
⚠	R857	QRZ0077-270	27	1/4W	FUSIBLE	G
	R961	QRD167J-823	82K	1/6W	CARBON	
	R962	QRD167J-104	100K	1/6W	CARBON	
	R963	QRD167J-563	56K	1/6W	CARBON	
	R964	QRD167J-104	100K	1/6W	CARBON	
	R965	QRD167J-683	68K	1/6W	CARBON	
	R966	QRD167J-392	3.9K	1/6W	CARBON	
	R967	QRD167J-224	220K	1/6W	CARBON	
	R968	QRD167J-103	10K	1/6W	CARBON	
	R969	QRD167J-121	120	1/6W	CARBON	A
	R969	QRD167J-121	120	1/6W	CARBON	B
	R969	QRD167J-390	39	1/6W	CARBON	C
	R969	QRD167J-390	39	1/6W	CARBON	D
	R969	QRD167J-390	39	1/6W	CARBON	EBS
	R969	QRD167J-390	39	1/6W	CARBON	F
	R969	QRD167J-390	39	1/6W	CARBON	G
⚠	R970	QRD125J-471	470	1/2W	UNF.CARBON	
⚠	R971	QRG022J-561A	560	2W	O.M.FILM	

⚠ : SAFETY PARTS

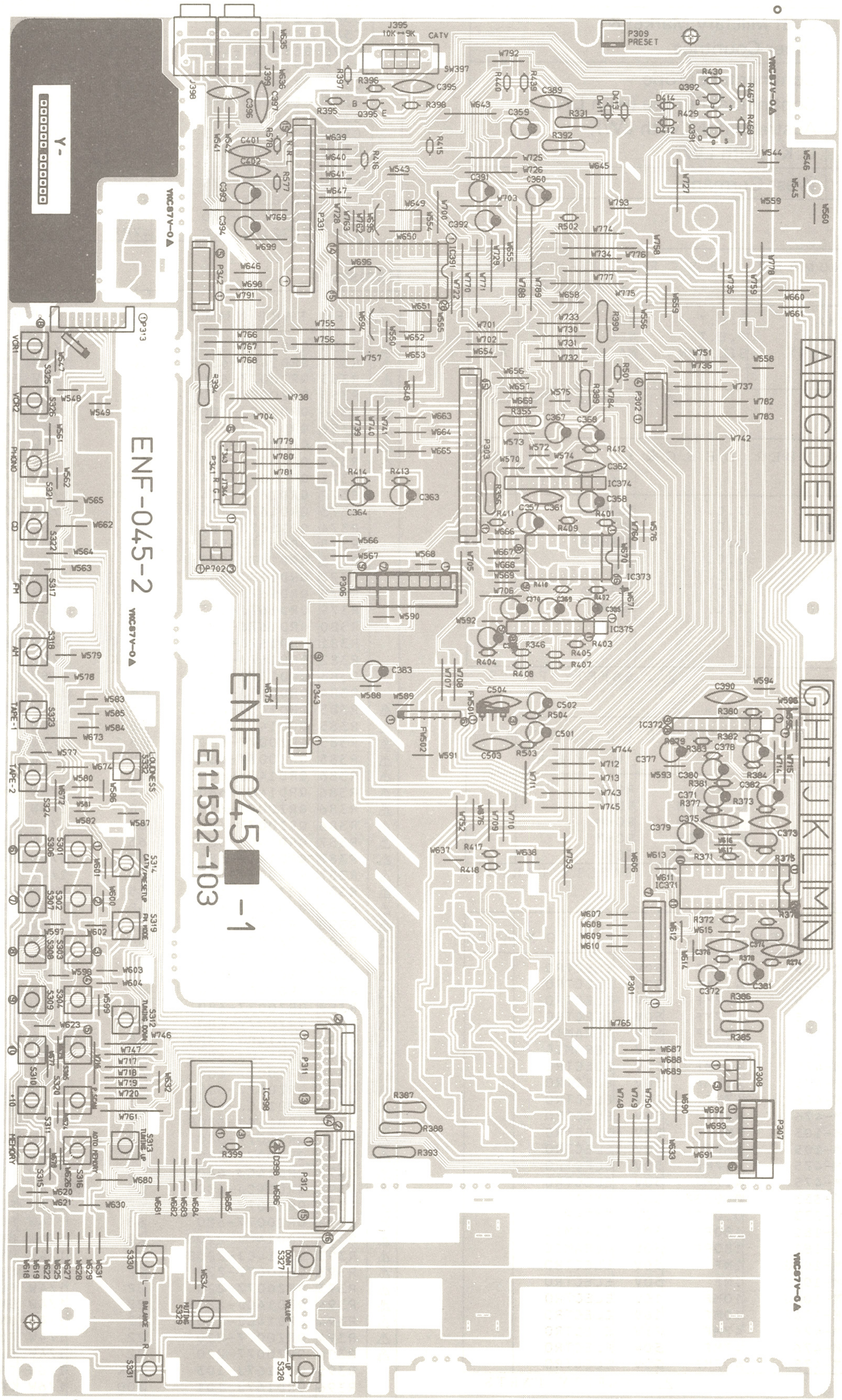
Others

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
		EMG7331-002U	FUSE CLIP	
		EMG7331-002U	FUSE CLIP	A
		EMG7331-002U	FUSE CLIP	B
		EMG7331-002U	FUSE CLIP	D
		EMG7331-002U	FUSE CLIP	EBS
		EMG7331-002U	FUSE CLIP	F
		EMG7331-002U	FUSE CLIP	G
		EMG7331-002	FUSE CLIP	
		EMG7331-002	FUSE CLIP	A
		EMG7331-002	FUSE CLIP	B
		EMG7331-002	FUSE CLIP	D
		EMG7331-002	FUSE CLIP	EBS
		EMG7331-002	FUSE CLIP	F
		EMG7331-002	FUSE CLIP	G
⚠		ETP1000-41EA	POWER TRANSFORMER	D
⚠		ETP1000-41EA	POWER TRANSFORMER	F
⚠		ETP1000-41EA	POWER TRANSFORMER	G
⚠		ETP1000-41EABS	POWER TRANSFORMER	EBS
⚠		ETP1000-41ZB	POWER TRANSFORMER	C
⚠		ETP1000-42JA	POWER TRANSFORMER	A
⚠		ETP1000-42JA	POWER TRANSFORMER	B
		E11666-002	CIRCUIT BOARD	A
		E11666-002	CIRCUIT BOARD	B
		E11666-102	CIRCUIT BOARD	C
		E11666-102	CIRCUIT BOARD	D
		E11666-102	CIRCUIT BOARD	F
		E11666-102	CIRCUIT BOARD	G
		E11666-102BS	CIRCUIT COARD	EBS
		E65508-002	TAB	
		E67764-102	WRAPPING TERMINAL	
		E67764-202	WRAPPING TERMINAL	
		E67764-202	WRAPPING TERMINAL	
		E67764-203	WRAPPING TERMINAL	
		E67764-302	WRAPPING TERMINAL	A
		E67764-302	WRAPPING TERMINAL	B
		E67764-302	WRAPPING TERMINAL	C
		E70859-001	EARTH PLATE	
		E70859-001	EARTH PLATE	A
		E70859-001	EARTH PLATE	B
		E70945-H40B	HEAT SINK	C
		E74754-001	HEAT SINK	
⚠		QMC0437-002	AC OUTLET	C
⚠		QMC0440-001	AC OUTLET	A
⚠		QMC0440-001	AC OUTLET	B
		SBSB3008CC	SCREW	
		SBSB3012CC	SCREW	C
		SBSE3008CC	SCREW	
	J341	EMN00YV-304A	3P PIN JACK	
	J342	EMN00YV-205A	2P PIN JACK	
	J961	EMV7122-003	CONNECTOR	
	J962	EMV7122-003	CONNECTOR	
	P342	EMV7125-005R	CONNECTOR	
	P851	EMV7122-003	CONNECTOR	
	P852	EMV7122-005	CONNECTOR	
	FW341	EWR36B-20LST	FLAT WIRE	
	RY001	ESK1D12-113	RELAY	
	RY001	ESK1D12-113	RELAY	A
	RY001	ESK1D12-113	RELAY	B
	RY001	ESK1D12-113	RELAY	C
	RY001	ESK1D12-113	RELAY	D
	RY001	ESK1D12-113	RELAY	F
	RY001	ESK1D12-113	RELAY	G
	RY001	ESK1D12-113BS	RELAY	EBS

⚠ : SAFETY PARTS

■ ENF-045☐Volume. SEA PC Board Ass'y

Note: ENF-045☐varies according to the areas employed. See note (1) when placing an order.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ENF-045■-1
E11592-103
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Y-
YWC67V-0▲
CATV
P309 PRESET
J395
SW397
P301
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P303
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P341
P342
P343
IC371
IC372
IC373
IC374
IC375
IC390
VOR1
VOR2
PHONO
CD
FM
AM
TAPE-1
TAPE-2
LOUDNESS
CATV/PRESETUP
FM MODE
TUNING DOWN
TUNING UP
AUTO/PRESET
MEMORY
BALANCE
MUTING
VOLUME
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S325
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S314
S319
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S327
S329
S331
S328

Note (1)

PC Board Ass'y	Designated Areas
ENF-045 A	U.S.A., Canada
ENF-045 B	U.S. Millitary Market & Other Countries
ENF-045 C	Continental Europe Continental Europe (with LW), Australia, Italy (with LW), U.K. (with LW)
ENF-045 D	West Germany

Transistors

⚠	ITEM	PART NUMBER	DESCRIPTION		AREA
				MAKER	
	Q391	2SK105(H)	F.E.T	NEC	
	Q392	2SK105(H)	F.E.T	NEC	
	Q395	2SC1685(Q,R)	SILICON	MATSUSHITA	A

⚠ : SAFETY PARTS

I.C.s

⚠	ITEM	PART NUMBER	DESCRIPTION		AREA
				MAKER	
	IC371	TC9177P	I.C.	TOSHIBA	
	IC372	NJM4560SD	I.C.	JRC	
	IC373	TC9176P	I.C.	TOSHIBA	
	IC374	NJM4560SD	I.C.	JRC	
	IC375	NJM4560SD	I.C.	JRC	
	IC391	TC9162N	I.C.	TOSHIBA	
	IC398	A1QH3021H0	I.C.	SHARP	

⚠ : SAFETY PARTS

Diodes

⚠	ITEM	PART NUMBER	DESCRIPTION		AREA
				MAKER	
	D398	SLH-34VC3F	L.E.D.	ROHM	
	D411	1SS133	SILICON	ROHM	
	D412	1SS133	SILICON	ROHM	
	D413	1SS133	SILICON	ROHM	
	D414	1SS133	SILICON	ROHM	

⚠ : SAFETY PARTS

Capaciters

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
	C357	QETB1HM-475	4.7MF	50V	ELECTRO	
	C358	QETB1HM-475	4.7MF	50V	ELECTRO	
	C359	QETB1HM-475	4.7MF	50V	ELECTRO	
	C360	QETB1HM-475	4.7MF	50V	ELECTRO	
	C361	QCS21HJ-101	100PF	50V	CERAMIC	
	C362	QCS21HJ-101	100PF	50V	CERAMIC	
	C363	QETB1HM-475	4.7MF	50V	ELECTRO	
	C364	QETB1HM-475	4.7MF	50V	ELECTRO	
	C367	QETB1EM-476	47MF	25V	ELECTRO	
	C368	QETB1HM-476	47MF	50V	ELECTRO	
	C369	QETB1HM-105	1MF	50V	ELECTRO	
	C370	QETB1HM-105	1MF	50V	ELECTRO	
	C371	QETB1HM-475	4.7MF	50V	ELECTRO	
	C372	QETB1HM-475	4.7MF	50V	ELECTRO	
	C373	QFN81HK-333	0.033MF	50V	MYLAR	
	C374	QFN81HK-333	0.033MF	50V	MYLAR	
	C375	QCS21HJ-181	180PF	50V	CERAMIC	
	C376	QCS21HJ-181	180PF	50V	CERAMIC	
	C377	QEK61HM-105G	1MF	50V	ELECTRO	
	C378	QEK61HM-105G	1MF	50V	ELECTRO	
	C379	QEK61CM-106G	10MF	16V	ELECTRO	
	C380	QEK61CM-106G	10MF	16V	ELECTRO	
	C381	QETB1EM-476	47MF	25V	ELECTRO	
	C382	QETB1HM-476	47MF	50V	ELECTRO	
	C383	QETB1HM-475	4.7MF	50V	ELECTRO	

⚠ : SAFETY PARTS

Capacitors

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
	C385	QETB1EM-106	10MF	25V	ELECTRO	
	C386	QETB1EM-106	10MF	25V	ELECTRO	
	C389	QCY21HK-472	4700PF	50V	CERAMIC	
	C390	QCY21HK-472	4700PF	50V	CERAMIC	
	C391	QETB1EM-476	47MF	25V	ELECTRO	
	C392	QETB1HM-476	47MF	50V	ELECTRO	
	C393	QETB1EM-476	47MF	25V	ELECTRO	
	C394	QETB1EM-476	47MF	25V	ELECTRO	
	C395	QCF21HP-223	0.022MF	50V	CERAMIC	A
	C396	QCF21HP-223	0.022MF	50V	CERAMIC	
	C397	QCF21HP-223	0.022MF	50V	CERAMIC	
	C501	QETB1HM-475	4.7MF	50V	ELECTRO	
	C502	QETB1HM-475	4.7MF	50V	ELECTRO	
	C503	QCS21HJ-470	47PF	50V	CERAMIC	
	C504	QCS21HJ-470	47PF	50V	CERAMIC	

⚠ : SAFETY PARTS

Resistors

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
⚠	R355	QRD14CJ-680S	68	1/4W	UNF.CARBON	A
⚠	R355	QRD14CJ-680S	68	1/4W	UNF.CARBON	B
⚠	R355	QRZ0077-680	68	1/4W	FUSIBLE	C
⚠	R355	QRZ0077-680	68	1/4W	FUSIBLE	D
⚠	R356	QRD14CJ-680S	68	1/4W	UNF.CARBON	A
⚠	R356	QRD14CJ-680S	68	1/4W	UNF.CARBON	B
⚠	R356	QRZ0077-680	68	1/4W	FUSIBLE	C
⚠	R356	QRZ0077-680	68	1/4W	FUSIBLE	D
	R371	QRD167J-274	270K	1/6W	CARBON	
	R372	QRD167J-274	270K	1/6W	CARBON	
	R373	QRD167J-105	1M	1/6W	CARBON	
	R374	QRD167J-105	1M	1/6W	CARBON	
	R375	QRD167J-563	56K	1/6W	CARBON	
	R376	QRD167J-563	56K	1/6W	CARBON	
	R377	QRD167J-563	56K	1/6W	CARBON	
	R378	QRD167J-563	56K	1/6W	CARBON	
	R379	QRD167J-103	10K	1/6W	CARBON	
	R380	QRD167J-103	10K	1/6W	CARBON	
	R381	QRD167J-912	9.1K	1/6W	CARBON	
	R382	QRD167J-912	9.1K	1/6W	CARBON	
	R383	QRD167J-105	1M	1/6W	CARBON	
	R384	QRD167J-105	1M	1/6W	CARBON	
⚠	R385	QRD14CJ-680S	68	1/4W	UNF.CARBON	A
⚠	R385	QRD14CJ-680S	68	1/4W	UNF.CARBON	B
⚠	R385	QRZ0077-680	68	1/4W	FUSIBLE	C
⚠	R385	QRZ0077-680	68	1/4W	FUSIBLE	D
⚠	R386	QRD14CJ-680S	68	1/4W	UNF.CARBON	A
⚠	R386	QRD14CJ-680S	68	1/4W	UNF.CARBON	B
⚠	R386	QRZ0077-680	68	1/4W	FUSIBLE	C
⚠	R386	QRZ0077-680	68	1/4W	FUSIBLE	D
⚠	R387	QRD14CJ-680S	68	1/4W	UNF.CARBON	A
⚠	R387	QRD14CJ-680S	68	1/4W	UNF.CARBON	B
⚠	R387	QRZ0077-680	68	1/4W	FUSIBLE	C
⚠	R387	QRZ0077-680	68	1/4W	FUSIBLE	D
⚠	R388	QRD14CJ-680S	68	1/4W	UNF.CARBON	A
⚠	R388	QRD14CJ-680S	68	1/4W	UNF.CARBON	B
⚠	R388	QRZ0077-680	68	1/4W	FUSIBLE	C
⚠	R388	QRZ0077-680	68	1/4W	FUSIBLE	D
⚠	R389	QRD14CJ-680S	68	1/4W	UNF.CARBON	A
⚠	R389	QRD14CJ-680S	68	1/4W	UNF.CARBON	B
⚠	R389	QRZ0077-680	68	1/4W	FUSIBLE	C
⚠	R389	QRZ0077-680	68	1/4W	FUSIBLE	D
⚠	R390	QRD14CJ-680S	68	1/4W	UNF.CARBON	A
⚠	R390	QRD14CJ-680S	68	1/4W	UNF.CARBON	B
⚠	R390	QRZ0077-680	68	1/4W	FUSIBLE	C
⚠	R390	QRZ0077-680	68	1/4W	FUSIBLE	D
⚠	R391	QRD14CJ-680S	68	1/4W	UNF.CARBON	A
⚠	R391	QRD14CJ-680S	68	1/4W	UNF.CARBON	B
⚠	R391	QRZ0077-680	68	1/4W	FUSIBLE	C
⚠	R391	QRZ0077-680	68	1/4W	FUSIBLE	D
⚠	R392	QRD14CJ-680S	68	1/4W	UNF.CARBON	A
⚠	R392	QRD14CJ-680S	68	1/4W	UNF.CARBON	B
⚠	R392	QRZ0077-680	68	1/4W	FUSIBLE	C
⚠	R392	QRZ0077-680	68	1/4W	FUSIBLE	D
⚠	R393	QRD14CJ-220S	22	1/4W	UNF.CARBON	A
⚠	R393	QRD14CJ-220S	22	1/4W	UNF.CARBON	B
⚠	R393	QRZ0077-220	22	1/4W	FUSIBLE	C
⚠	R393	QRZ0077-220	22	1/4W	FUSIBLE	D
⚠	R394	QRD14CJ-220S	22	1/4W	UNF.CARBON	A
⚠	R394	QRD14CJ-220S	22	1/4W	UNF.CARBON	B
⚠	R394	QRZ0077-220	22	1/4W	FUSIBLE	C
⚠	R394	QRZ0077-220	22	1/4W	FUSIBLE	D
	R395	QRD167J-103	10K	1/6W	CARBON	A
	R396	QRD167J-101	100	1/6W	CARBON	A
	R397	QRD167J-221	220	1/6W	CARBON	A

⚠ : SAFETY PARTS

Resistors

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
	R398	QRD167J-103	10K	1/6W	CARBON	A
	R399	QRD167J-221	220	1/6W	CARBON	
	R401	QRD167J-222	2.2K	1/6W	CARBON	
	R402	QRD167J-222	2.2K	1/6W	CARBON	
	R403	QRD167J-432	4.3K	1/6W	CARBON	
	R404	QRD167J-432	4.3K	1/6W	CARBON	
	R405	QRD167J-103	10K	1/6W	CARBON	
	R406	QRD167J-103	10K	1/6W	CARBON	
	R407	QRD167J-105	1M	1/6W	CARBON	
	R408	QRD167J-105	1M	1/6W	CARBON	
	R409	QRD167J-274	270K	1/6W	CARBON	
	R410	QRD167J-274	270K	1/6W	CARBON	
	R411	QRD167J-104	100K	1/6W	CARBON	
	R412	QRD167J-104	100K	1/6W	CARBON	
	R413	QRD167J-222	2.2K	1/6W	CARBON	
	R414	QRD167J-222	2.2K	1/6W	CARBON	
	R415	QRD167J-154	150K	1/6W	CARBON	
	R416	QRD167J-154	150K	1/6W	CARBON	
	R417	QRD167J-363	36K	1/6W	CARBON	
	R418	QRD167J-363	36K	1/6W	CARBON	
	R429	QRD167J-103	10K	1/6W	CARBON	
	R430	QRD167J-103	10K	1/6W	CARBON	
	R439	QRD167J-103	10K	1/6W	CARBON	
	R440	QRD167J-103	10K	1/6W	CARBON	
	R467	QRD167J-513	51K	1/6W	CARBON	
	R468	QRD167J-513	51K	1/6W	CARBON	
	R501	QRD167J-513	51K	1/6W	CARBON	
	R502	QRD167J-513	51K	1/6W	CARBON	
	R503	QRD167J-105	1M	1/6W	CARBON	
	R504	QRD167J-105	1M	1/6W	CARBON	
	R577	QRD167J-363	36K	1/6W	CARBON	
	R578	QRD167J-363	36K	1/6W	CARBON	

⚠ : SAFETY PARTS

Others

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
		E11592-103	**CIRCUIT BOARD**	
	J398	QMS3L10-0A0	MINI JACK	
	J399	QMS3L10-0A0	MINI JACK	
	P301	EMV5125-007	PLUG ASSY	
	P302	EMV5125-004	PLUG ASSY	
	P303	EMV5125-015	PLUG ASSY	
	P306	EMV7112-007	CONNECTOR	A
	P306	EMV7112-007	CONNECTOR	C
	P306	EMV7112-007	CONNECTOR	D
	P306	EMV7112-009	CONNECTOR	B
	P307	EMV7112-006	CONNECTOR	
	P308	EMV7122-003	CONNECTOR	
	P309	QMV5005-002K	PLUG ASSY	
	P311	EMV7128-014	CONNECTOR	
	P312	EMV7128-016	CONNECTOR	
	P313	EMV7120-008	CONNECTOR	
	P331	EMV5125-015	PLUG ASSY	
	P342	EMV5125-005	PLUG ASSY	
	P343	EMV5125-009	PLUG ASSY	
	P702	EMV7122-003	CONNECTOR	
	S301	ESP0001-018	TACT SWITCH	
	S302	ESP0001-018	TACT SWITCH	
	S303	ESP0001-018	TACT SWITCH	
	S304	ESP0001-018	TACT SWITCH	
	S305	ESP0001-018	TACT SWITCH	
	S306	ESP0001-018	TACT SWITCH	
	S307	ESP0001-018	TACT SWITCH	
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	S318	ESP0001-018	TACT SWITCH	
	S319	ESP0001-018	TACT SWITCH	
	S320	ESP0001-018	TACT SWITCH	
	S321	ESP0001-018	TACT SWITCH	
	S322	ESP0001-018	TACT SWITCH	
	S323	ESP0001-018	TACT SWITCH	
	S324	ESP0001-018	TACT SWITCH	
	S325	ESP0001-018	TACT SWITCH	

⚠ : SAFETY PARTS

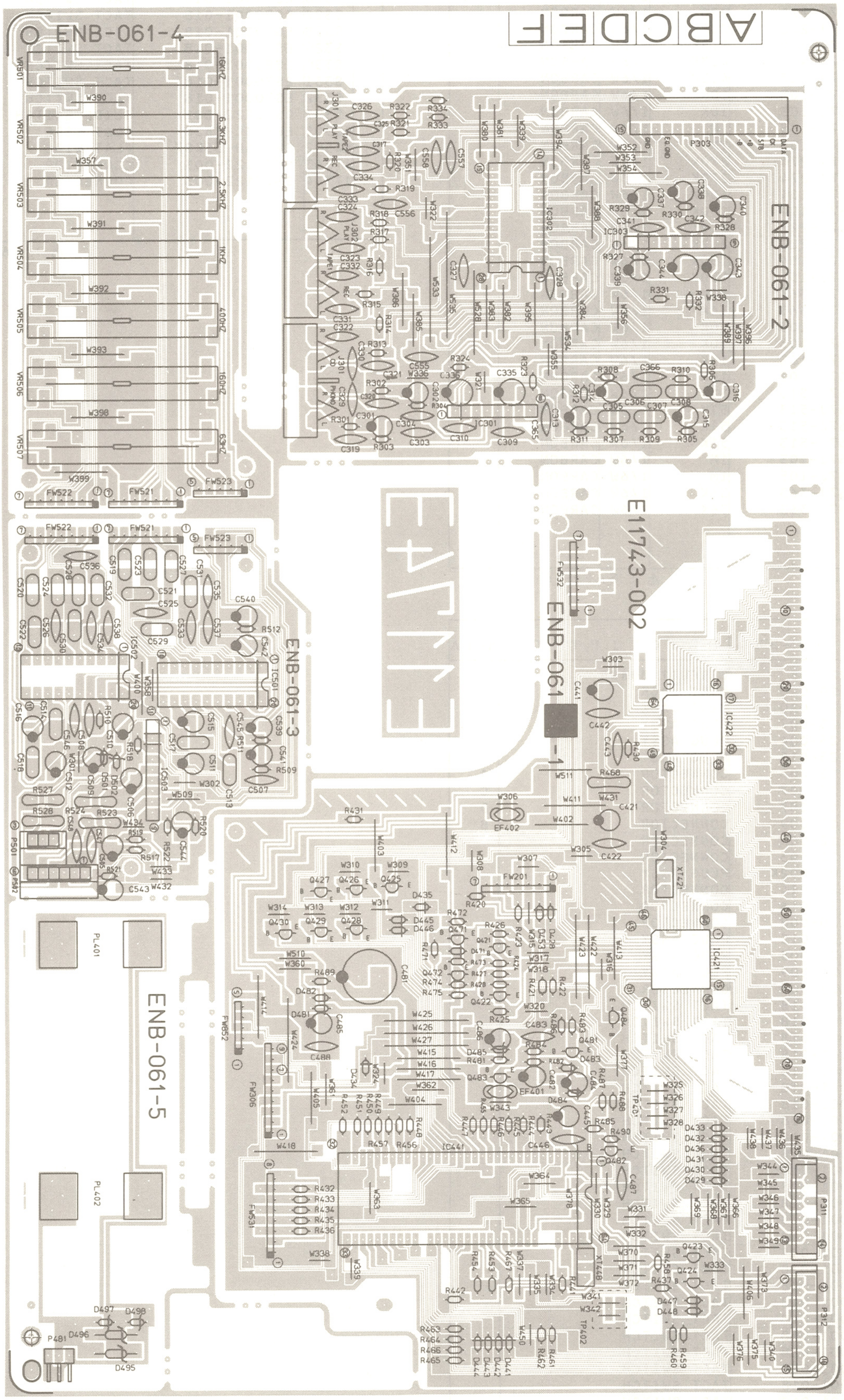
Others

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
	S326	ESP0001-018	TACT SWITCH	
	S327	ESP0001-018	TACT SWITCH	
	S328	ESP0001-018	TACT SWITCH	
	S329	ESP0001-018	TACT SWITCH	
	S330	ESP0001-018	TACT SWITCH	
	S331	ESP0001-018	TACT SWITCH	
	S332	ESP0001-018	TACT SWITCH	
	S397	QSS1F22-E01	SLIDE SWITCH	B
	FW501	EWR23C-35JN	FLAT WIRE	
	FW502	EWR36B-35KST	FLAT WIRE	
	JT343	EMV7122-003	CONNECTOR	
	JT344	EMV7122-003	CONNECTOR	

⚠ : SAFETY PARTS

■ ENB-061☐ LCD Display Tuner Audio Control PC Board Ass'y

Note: ENB-061☐ varies according to the areas employed. See note (1) when placing an order.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VR504
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VR506
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6.3KHZ
2.5KHZ
1KHZ
400HZ
160HZ
63HZ
FW521
FW522
FW523
FW532
FW533
FW852
FW306
XT421
XT441
TP401
TP402
J301
J302
J303

Note (1)

PC Board Ass'y	Designated Areas
ENB-061 A	U.S.A., Canada
ENB-061 B	U.S. Military Market & Other Countries
ENB-061 C	Continental Europe, Australia
ENB-061 D	Continental Europe (with LW), U.K. (with LW)
ENB-061 E	West Germany
ENB-061 F	Italy

Transistors

⚠	ITEM	PART NUMBER	DESCRIPTION		AREA
				MAKER	
	Q421	2SC458(C,D)	SILICON	HITACHI	
	Q422	2SC458(C,D)	SILICON	HITACHI	
	Q423	DTC144ES	SILICON	ROHM	
	Q424	DTC144ES	SILICON	ROHM	
	Q425	DTC144ES	SILICON	ROHM	
	Q426	DTC144ES	SILICON	ROHM	
	Q427	DTC144ES	SILICON	ROHM	
	Q428	DTC144ES	SILICON	ROHM	
	Q429	DTC144ES	SILICON	ROHM	
	Q430	DTC144ES	SILICON	ROHM	
	Q471	2SC458(C,D)	SILICON	HITACHI	
	Q472	2SC458(C,D)	SILICON	HITACHI	
	Q481	2SC458(C,D)	SILICON	HITACHI	
	Q482	2SC458(C,D)	SILICON	HITACHI	
	Q483	DTC144ES	SILICON	ROHM	

⚠ : SAFETY PARTS

I.C.s

⚠	ITEM	PART NUMBER	DESCRIPTION		AREA
				MAKER	
	IC301	M5218L-R	I.C.	MITSUBISHI	
	IC302	TC9164N	I.C.	TOSHIBA	
	IC303	NJM4560SD	I.C.	JRC	
	IC421	TC9306F-034BS	I.C.	TOSHIBA	
	IC422	LC7582A	I.C.	SANYO	
	IC441	MN17581JSL1	I.C.	MATSUSHITA	
	IC501	LA3607S	I.C.	SANYO	
	IC502	LA3607S	I.C.	SANYO	
	IC503	NJM4560SD	I.C.	JRC	

⚠ : SAFETY PARTS

Diodes

⚠	ITEM	PART NUMBER	DESCRIPTION		AREA
				MAKER	
	D428	1SS133	SILICON	ROHM	
	D429	1SS133	SILICON	ROHM	F
	D430	1SS133	SILICON	ROHM	A
	D431	1SS133	SILICON	ROHM	F
	D432	1SS133	SILICON	ROHM	C
	D432	1SS133	SILICON	ROHM	D
	D432	1SS133	SILICON	ROHM	E
	D432	1SS133	SILICON	ROHM	F
	D433	1SS133	SILICON	ROHM	D
	D433	1SS133	SILICON	ROHM	F
	D434	1SS133	SILICON	ROHM	B
	D435	1SS133	SILICON	ROHM	
	D436	1SS133	SILICON	ROHM	
	D441	1SS133	SILICON	ROHM	
	D442	1SS133	SILICON	ROHM	
	D443	1SS133	SILICON	ROHM	
	D444	1SS133	SILICON	ROHM	
	D445	1SS133	SILICON	ROHM	
	D446	1SS133	SILICON	ROHM	
	D447	1SS133	SILICON	ROHM	
	D448	1SS133	SILICON	ROHM	
	D471	1SS133	SILICON	ROHM	
	D481	1SS133	SILICON	ROHM	
	D482	1SS133	SILICON	ROHM	
	D483	1SS133	SILICON	ROHM	

⚠ : SAFETY PARTS

Diodes

⚠	ITEM	PART NUMBER	DESCRIPTION		AREA
				MAKER	
	D484	1SS133	SILICON	ROHM	
	D485	MTZ5.6JC	ZENER	ROHM	
	D487	MTZ12JC	ZENER	ROHM	
	D488	MTZ12JC	ZENER	ROHM	
	D489	MTZ12JC	ZENER	ROHM	
	D490	MTZ12JC	ZENER	ROHM	
	D495	RD12EB3	ZENER	NEC	C
	D495	RD12EB3	ZENER	NEC	D
	D495	RD12EB3	ZENER	NEC	E
	D495	RD12EB3	ZENER	NEC	F
	D496	RD12EB3	ZENER	NEC	C
	D496	RD12EB3	ZENER	NEC	D
	D496	RD12EB3	ZENER	NEC	E
	D496	RD12EB3	ZENER	NEC	F
	D497	MTZ12JC	ZENER	ROHM	A
	D497	MTZ12JC	ZENER	ROHM	B
	D498	MTZ12JC	ZENER	ROHM	A
	D498	MTZ12JC	ZENER	ROHM	B
	D501	MTZ7.5JB	ZENER	ROHM	
	D502	MTZ7.5JB	ZENER	ROHM	

⚠ : SAFETY PARTS

Capacitors

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
	C301	QETB1HM-475	4.7MF	50V	ELECTRO	
	C302	QETB1HM-475	4.7MF	50V	ELECTRO	
	C303	QCS21HJ-101	100PF	50V	CERAMIC	A
	C303	QCS21HJ-101	100PF	50V	CERAMIC	B
	C303	QCS21HJ-101	100PF	50V	CERAMIC	C
	C303	QCS21HJ-101	100PF	50V	CERAMIC	D
	C303	QCS21HJ-101	100PF	50V	CERAMIC	F
	C303	QCS21HJ-471	470PF	50V	CERAMIC	E
	C304	QCS21HJ-101	100PF	50V	CERAMIC	A
	C304	QCS21HJ-101	100PF	50V	CERAMIC	B
	C304	QCS21HJ-101	100PF	50V	CERAMIC	C
	C304	QCS21HJ-101	100PF	50V	CERAMIC	D
	C304	QCS21HJ-101	100PF	50V	CERAMIC	F
	C304	QCS21HJ-471	470PF	50V	CERAMIC	E
	C305	QFN81HJ-182	1800PF	50V	MYLAR	
	C306	QFN81HJ-182	1800PF	50V	MYLAR	
	C307	QFN81HJ-682	6800PF	50V	MYLAR	
	C308	QFN81HJ-682	6800PF	50V	MYLAR	
	C309	QCS21HJ-101	100PF	50V	CERAMIC	
	C310	QCS21HJ-101	100PF	50V	CERAMIC	
	C313	QETB1HM-475	4.7MF	50V	ELECTRO	
	C314	QETB1HM-475	4.7MF	50V	ELECTRO	
	C315	QETB1CM-107	100MF	16V	ELECTRO	
	C316	QETB1CM-107	100MF	16V	ELECTRO	
	C317	QCF21HP-223	0.022MF	50V	CERAMIC	
	C319	QCS21HJ-101	100PF	50V	CERAMIC	E
	C320	QCS21HJ-101	100PF	50V	CERAMIC	E
	C321	QCS21HJ-331	330PF	50V	CERAMIC	E
	C322	QCS21HJ-331	330PF	50V	CERAMIC	E
	C323	QCS21HJ-331	330PF	50V	CERAMIC	E
	C324	QCS21HJ-331	330PF	50V	CERAMIC	E
	C325	QCS21HJ-331	330PF	50V	CERAMIC	E
	C326	QCS21HJ-331	330PF	50V	CERAMIC	E
	C327	QCF21HP-223	0.022MF	50V	CERAMIC	
	C328	QCF21HP-223	0.022MF	50V	CERAMIC	
	C329	QCF21HP-223	0.022MF	50V	CERAMIC	
	C330	QCF21HP-223	0.022MF	50V	CERAMIC	
	C331	QCS21HJ-151	150PF	50V	CERAMIC	E
	C332	QCS21HJ-151	150PF	50V	CERAMIC	E
	C333	QCS21HJ-101	100PF	50V	CERAMIC	E
	C334	QCS21HJ-101	100PF	50V	CERAMIC	E
	C335	QETB1EM-476	47MF	25V	ELECTRO	
	C336	QETB1EM-476	47MF	25V	ELECTRO	
	C337	QETB1CM-226	22MF	16V	ELECTRO	
	C338	QETB1CM-226	22MF	16V	ELECTRO	
	C339	QETB1CM-226	22MF	16V	ELECTRO	
	C340	QETB1CM-226	22MF	16V	ELECTRO	
	C341	QCS21HJ-101	100PF	50V	CERAMIC	
	C342	QCS21HJ-101	100PF	50V	CERAMIC	
	C343	QETB1CM-226	22MF	16V	ELECTRO	
	C344	QETB1HM-226	22MF	50V	ELECTRO	
	C365	QCS21HJ-101	100PF	50V	CERAMIC	
	C366	QCS21HJ-101	100PF	50V	CERAMIC	
	C421	QETB1AM-107	100MF	10V	ELECTRO	
	C422	QCF21HP-223	0.022MF	50V	CERAMIC	

⚠ : SAFETY PARTS

Capacitors

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
	C441	QETB0JM-477	470MF	6.3V	ELECTRO	
	C442	QCF21HP-223	0.022MF	50V	CERAMIC	
	C443	QCS21HJ-681	680PF	50V	CERAMIC	
	C445	QETB0JM-477	470MF	6.3V	ELECTRO	
	C446	QCF21HP-223	0.022MF	50V	CERAMIC	
	C481	EEZ0503-479	47000MF		ELECTRO	
	C482	QETB1HM-225	2.2MF	50V	ELECTRO	
	C483	QCF21HP-223	0.022MF	50V	CERAMIC	
	C484	QETB1HM-225	2.2MF	50V	ELECTRO	
	C485	QETB0JM-227	220MF	6.3V	ELECTRO	
	C486	QETB1EM-106	10MF	25V	ELECTRO	
	C488	QCZ0205-155	1.5MF	25V	CERAMIC	
	C505	QETB1CM-226	22MF	16V	ELECTRO	
	C506	QETB1CM-226	22MF	16V	ELECTRO	
	C507	QCS21HJ-101	100PF	50V	CERAMIC	
	C508	QCS21HJ-101	100PF	50V	CERAMIC	
	C509	QETB1CM-226	22MF	16V	ELECTRO	
	C510	QETB1CM-226	22MF	16V	ELECTRO	
	C511	QETB1HM-105	1MF	50V	ELECTRO	
	C512	QETB1HM-105	1MF	50V	ELECTRO	
	C513	QFN81HK-683	0.068MF	50V	MYLAR	
	C514	QFN81HK-683	0.068MF	50V	MYLAR	
	C515	QETB1HM-474	0.47MF	50V	ELECTRO	
	C516	QETB1HM-474	0.47MF	50V	ELECTRO	
	C517	QFN81HK-223	0.022MF	50V	MYLAR	
	C518	QFN81HK-223	0.022MF	50V	MYLAR	
	C519	QFN81HK-154	0.15MF	50V	MYLAR	
	C520	QFN81HK-154	0.15MF	50V	MYLAR	
	C521	QFN81HK-103	0.01MF	50V	MYLAR	
	C522	QFN81HK-103	0.01MF	50V	MYLAR	
	C523	QFN81HK-683	0.068MF	50V	MYLAR	
	C524	QFN81HK-683	0.068MF	50V	MYLAR	
	C525	QCY21HK-392	3900PF	50V	CERAMIC	
	C526	QCY21HK-392	3900PF	50V	CERAMIC	
	C527	QFN81HK-273	0.027MF	50V	MYLAR	
	C528	QFN81HK-273	0.027MF	50V	MYLAR	
	C529	QFN81HK-152	1500PF	50V	MYLAR	
	C530	QFN81HK-152	1500PF	50V	MYLAR	
	C531	QFN81HK-103	0.01MF	50V	MYLAR	
	C532	QFN81HK-103	0.01MF	50V	MYLAR	
	C533	QCY21HK-681	680PF	50V	CERAMIC	
	C534	QCY21HK-681	680PF	50V	CERAMIC	
	C535	QCY21HK-562	5600PF	50V	CERAMIC	
	C536	QCY21HK-562	5600PF	50V	CERAMIC	
	C537	QCS21HJ-221	220PF	50V	CERAMIC	
	C538	QCS21HJ-221	220PF	50V	CERAMIC	
	C539	QEK61CM-226	22MF	16V	ELECTRO	
	C540	QEK61CM-226	22MF	16V	ELECTRO	
	C541	QEK61CM-226	22MF	16V	ELECTRO	
	C542	QEK61CM-226	22MF	16V	ELECTRO	
	C543	QETB1CM-226	22MF	16V	ELECTRO	
	C544	QETB1CM-226	22MF	16V	ELECTRO	
	C545	QCS21HJ-330	33PF	50V	CERAMIC	
	C546	QCS21HJ-330	33PF	50V	CERAMIC	
	C547	QCF21HP-223	0.022MF	50V	CERAMIC	
	C548	QCF21HP-223	0.022MF	50V	CERAMIC	
	C555	QCS21HJ-221	220PF	50V	CERAMIC	E
	C556	QCS21HJ-221	220PF	50V	CERAMIC	E
	C557	QCS21HJ-221	220PF	50V	CERAMIC	E
	C558	QCS21HJ-221	220PF	50V	CERAMIC	E

⚠ : SAFETY PARTS

Resistors

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
	R301	QRD167J-222	2.2K	1/6W	CARBON	
	R302	QRD167J-222	2.2K	1/6W	CARBON	
	R303	QRD167J-473	47K	1/6W	CARBON	
	R304	QRD167J-473	47K	1/6W	CARBON	
	R305	QRD167J-561	560	1/6W	CARBON	
	R306	QRD167J-561	560	1/6W	CARBON	
	R307	QRD167J-393	39K	1/6W	CARBON	
	R308	QRD167J-393	39K	1/6W	CARBON	
	R309	QRD167J-474	470K	1/6W	CARBON	
	R310	QRD167J-474	470K	1/6W	CARBON	
	R311	QRD167J-104	100K	1/6W	CARBON	
	R312	QRD167J-104	100K	1/6W	CARBON	
	R313	QRD167J-221	220	1/6W	CARBON	
	R314	QRD167J-221	220	1/6W	CARBON	
	R315	QRD167J-221	220	1/6W	CARBON	A
	R315	QRD167J-221	220	1/6W	CARBON	B
	R315	QRD167J-221	220	1/6W	CARBON	C
	R315	QRD167J-221	220	1/6W	CARBON	D
	R315	QRD167J-221	220	1/6W	CARBON	F
	R315	QRD167J-222	2.2K	1/6W	CARBON	E

⚠ : SAFETY PARTS

Resistors

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
	R316	QRD167J-221	220	1/6W	CARBON	A
	R316	QRD167J-221	220	1/6W	CARBON	B
	R316	QRD167J-221	220	1/6W	CARBON	C
	R316	QRD167J-221	220	1/6W	CARBON	D
	R316	QRD167J-221	220	1/6W	CARBON	F
	R316	QRD167J-222	2.2K	1/6W	CARBON	E
	R317	QRD167J-221	220	1/6W	CARBON	
	R318	QRD167J-221	220	1/6W	CARBON	
	R319	QRD167J-221	220	1/6W	CARBON	A
	R319	QRD167J-221	220	1/6W	CARBON	B
	R319	QRD167J-221	220	1/6W	CARBON	C
	R319	QRD167J-221	220	1/6W	CARBON	D
	R319	QRD167J-221	220	1/6W	CARBON	F
	R319	QRD167J-222	2.2K	1/6W	CARBON	E
	R320	QRD167J-221	220	1/6W	CARBON	A
	R320	QRD167J-221	220	1/6W	CARBON	B
	R320	QRD167J-221	220	1/6W	CARBON	C
	R320	QRD167J-221	220	1/6W	CARBON	D
	R320	QRD167J-221	220	1/6W	CARBON	F
	R320	QRD167J-222	2.2K	1/6W	CARBON	E
	R321	QRD167J-221	220	1/6W	CARBON	
	R322	QRD167J-221	220	1/6W	CARBON	
	R323	QRD167J-331	330	1/6W	CARBON	
	R324	QRD167J-331	330	1/6W	CARBON	
	R327	QRD167J-124	120K	1/6W	CARBON	
	R328	QRD167J-124	120K	1/6W	CARBON	
	R329	QRD167J-473	47K	1/6W	CARBON	
	R330	QRD167J-473	47K	1/6W	CARBON	
	R331	QRD167J-124	120K	1/6W	CARBON	
	R332	QRD167J-124	120K	1/6W	CARBON	
	R420	QRD167J-103	10K	1/6W	CARBON	
	R421	QRD167J-103	10K	1/6W	CARBON	
	R422	QRD167J-103	10K	1/6W	CARBON	
	R423	QRD167J-103	10K	1/6W	CARBON	
	R424	QRD167J-471	470	1/6W	CARBON	
	R425	QRD167J-103	10K	1/6W	CARBON	
	R426	QRD167J-103	10K	1/6W	CARBON	
	R427	QRD167J-473	47K	1/6W	CARBON	
	R428	QRD167J-223	22K	1/6W	CARBON	
	R430	QRD167J-563	56K	1/6W	CARBON	
	R431	QRD167J-103	10K	1/6W	CARBON	
	R432	QRD167J-102	1K	1/6W	CARBON	
	R433	QRD167J-102	1K	1/6W	CARBON	
	R434	QRD167J-102	1K	1/6W	CARBON	
	R435	QRD167J-103	10K	1/6W	CARBON	
	R436	QRD167J-103	10K	1/6W	CARBON	
	R437	QRD167J-103	10K	1/6W	CARBON	
	R441	QRD167J-103	10K	1/6W	CARBON	
	R442	QRD167J-103	10K	1/6W	CARBON	
	R443	QRD167J-104	100K	1/6W	CARBON	
	R444	QRD167J-104	100K	1/6W	CARBON	
	R445	QRD167J-104	100K	1/6W	CARBON	
	R446	QRD167J-104	100K	1/6W	CARBON	
	R448	QRD167J-104	100K	1/6W	CARBON	
	R449	QRD167J-104	100K	1/6W	CARBON	
	R450	QRD167J-104	100K	1/6W	CARBON	
	R451	QRD167J-104	100K	1/6W	CARBON	
	R452	QRD167J-104	100K	1/6W	CARBON	
	R453	QRD167J-104	100K	1/6W	CARBON	
	R454	QRD167J-104	100K	1/6W	CARBON	
	R455	QRD167J-104	100K	1/6W	CARBON	
	R459	QRD167J-473	47K	1/6W	CARBON	
	R460	QRD167J-473	47K	1/6W	CARBON	
	R461	QRD167J-473	47K	1/6W	CARBON	
	R462	QRD167J-473	47K	1/6W	CARBON	
	R463	QRD167J-473	47K	1/6W	CARBON	
	R464	QRD167J-473	47K	1/6W	CARBON	
	R465	QRD167J-473	47K	1/6W	CARBON	
	R466	QRD167J-473	47K	1/6W	CARBON	
	R467	QRD167J-102	1K	1/6W	CARBON	
	R471	QRD167J-473	47K	1/6W	CARBON	
	R472	QRD167J-471	470	1/6W	CARBON	
	R473	QRD167J-473	47K	1/6W	CARBON	
	R474	QRD167J-223	22K	1/6W	CARBON	
	R475	QRD167J-103	10K	1/6W	CARBON	
	R481	QRD167J-222	2.2K	1/6W	CARBON	
	R482	QRD167J-472	4.7K	1/6W	CARBON	
	R483	QRD167J-102	1K	1/6W	CARBON	
	R484	QRD167J-332	3.3K	1/6W	CARBON	
	R485	QRD167J-473	47K	1/6W	CARBON	
	R486	QRD167J-473	47K	1/6W	CARBON	
	R487	QRD167J-223	22K	1/6W	CARBON	
	R488	QRD167J-473	47K	1/6W	CARBON	
	R489	QRD167J-331	330	1/6W	CARBON	
	R509	QRD167J-472	4.7K	1/6W	CARBON	

⚠ : SAFETY PARTS

Resistors

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
	R510	QRD167J-472	4.7K	1/6W	CARBON	
	R511	QRD167J-472	4.7K	1/6W	CARBON	
	R512	QRD167J-472	4.7K	1/6W	CARBON	
	R517	QRD167J-103	10K	1/6W	CARBON	
	R518	QRD167J-103	10K	1/6W	CARBON	
	R519	QRD167J-103	10K	1/6W	CARBON	
	R520	QRD167J-103	10K	1/6W	CARBON	
	R521	QRD167J-104	100K	1/6W	CARBON	
	R522	QRD167J-104	100K	1/6W	CARBON	
⚠	R523	QRD14CJ-680S	68	1/4W	UNF.CARBON	A
⚠	R523	QRD14CJ-680S	68	1/4W	UNF.CARBON	B
⚠	R523	QRZ0077-680	68	1/4W	FUSIBLE	C
⚠	R523	QRZ0077-680	68	1/4W	FUSIBLE	D
⚠	R523	QRZ0077-680	68	1/4W	FUSIBLE	E
⚠	R523	QRZ0077-680	68	1/4W	FUSIBLE	F
⚠	R524	QRD14CJ-680S	68	1/4W	UNF.CARBON	A
⚠	R524	QRD14CJ-680S	68	1/4W	UNF.CARBON	B
⚠	R524	QRZ0077-680	68	1/4W	FUSIBLE	C
⚠	R524	QRZ0077-680	68	1/4W	FUSIBLE	D
⚠	R524	QRZ0077-680	68	1/4W	FUSIBLE	E
⚠	R524	QRZ0077-680	68	1/4W	FUSIBLE	F
⚠	R527	QRD14CJ-391S	390	1/4W	UNF.CARBON	A
⚠	R527	QRD14CJ-391S	390	1/4W	UNF.CARBON	B
⚠	R527	QRZ0077-391	390	1/4W	FUSIBLE	C
⚠	R527	QRZ0077-391	390	1/4W	FUSIBLE	D
⚠	R527	QRZ0077-391	390	1/4W	FUSIBLE	E
⚠	R527	QRZ0077-391	390	1/4W	FUSIBLE	F
⚠	R528	QRD14CJ-391S	390	1/4W	UNF.CARBON	A
⚠	R528	QRD14CJ-391S	390	1/4W	UNF.CARBON	B
⚠	R528	QRZ0077-391	390	1/4W	FUSIBLE	C
⚠	R528	QRZ0077-391	390	1/4W	FUSIBLE	D
⚠	R528	QRZ0077-391	390	1/4W	FUSIBLE	E
⚠	R528	QRZ0077-391	390	1/4W	FUSIBLE	F
	VR501	QVUB01W-EF5D	250K		VARIABLE	
	VR502	QVUB01W-EF5D	250K		VARIABLE	
	VR503	QVUB01W-EF5D	250K		VARIABLE	
	VR504	QVUB01W-EF5D	250K		VARIABLE	
	VR505	QVUB01W-EF5D	250K		VARIABLE	
	VR506	QVUB01W-EF5D	250K		VARIABLE	
	VR507	QVUB01W-EF5D	250K		VARIABLE	

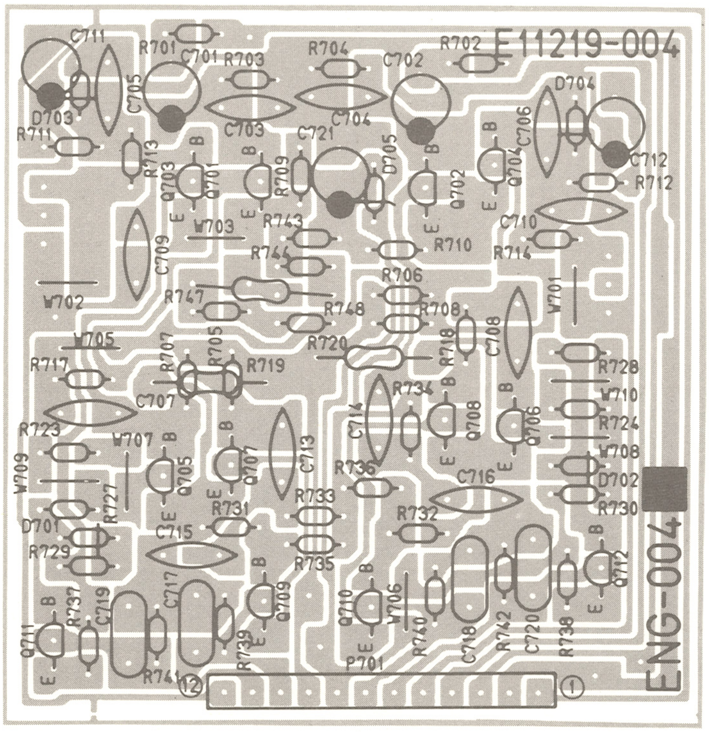
⚠ : SAFETY PARTS

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
		E11743-003	CIRCUIT BOARD	
		E45524-002	FUSE CLIP	
		E48269-001	SPACER	C
		E48269-001	SPACER	D
		E48269-001	SPACER	E
		E48269-001	SPACER	F
	J301	EMN00TV-405A	4P PIN JACK	
	J302	EMN00TV-402A	4P PIN JACK	
	J303	EMN00TV-405A	4P PIN JACK	
	P303	EMV7125-015R	CONNECTOR	
	P311	EMV5128-014	PLUG ASSY	
	P312	EMV5128-016	PLUG ASSY	
	P481	QMV5004-003K	PLUG ASSY	
	P501	EMV7112-003	CONNECTOR	
	P502	EMV7112-006	CONNECTOR	
	FW201	EWR37B-25KST	FLAT WIRE	
	FW306	EWR37B-16KST	FLAT WIRE	A
	FW306	EWR37B-16KST	FLAT WIRE	C
	FW306	EWR37B-16KST	FLAT WIRE	D
	FW306	EWR37B-16KST	FLAT WIRE	E
	FW306	EWR37B-16KST	FLAT WIRE	F
	FW306	EWR39B-16KST	FLAT WIRE	B
	FW521	EWR37B-08SST	FLAT WIRE	
	FW522	EWR37B-08SST	FLAT WIRE	
	FW523	EWR35B-08SST	FLAT WIRE	
	FW531	EWR38B-10KST	FLAT WIRE	
	FW532	EWR37B-30KST	FLAT WIRE	
	FW852	EWR35B-25LST	FLAT WIRE	
	LC421	ELU0002-044	LCD PANEL	
	XT421	ECX0072-000EM	RESONATOR	
	XT441	ECX0072-000EM	RESONATOR	

⚠ : SAFETY PARTS

■ ENG-004☐ Pre-Drive PC Board Ass'y

Note: ENG-004☐ varies according to the areas employed. See note (1) when placing an order.


E11219-004
ENG-004
C711
R701
C701
R703
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C721
C704
D705
C706
C712
R712
R713
Q703
Q701
R709
Q702
Q704
W703
R743
C710
R710
R714
C709
R744
R706
W701
W702
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C708
R707
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C707
R734
W710
R723
W707
Q708
Q706
R724
Q705
Q707
C713
C714
W708
W709
R736
C716
D702
R727
R731
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D701
C715
R732
R729
R735
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C717
Q709
Q710
W706
C719
R737
Q711
R739
R740
C718
R742
C720
R738
R741
P701
12
1
B
E

Note (1)

PC Board Ass'y	Designated Areas
ENG-004 Q	U.S.A., Canada
ENG-004 R	U.S. Militaly Market, Australia, Continental Europe, Continental Europe (with LW), Italy (with LW), U.K. (with LW), Other Countries
ENG-004 S	West Germany

Transistors

⚠	ITEM	PART NUMBER	DESCRIPTION		AREA
				MAKER	
	Q701	2SC2240(A,B)	SILICON	TOSHIBA	
	Q702	2SC2240(A,B)	SILICON	TOSHIBA	
	Q703	2SC2240(A,B)	SILICON	TOSHIBA	
	Q704	2SC2240(A,B)	SILICON	TOSHIBA	
	Q705	2SA1038(S,E)	SILICON	ROHM	
	Q706	2SA1038(S,E)	SILICON	ROHM	
	Q707	2SA933LN(R,S)	SILICON	ROHM	
	Q708	2SA933LN(R,S)	SILICON	ROHM	
	Q709	2SA1038(S,E)	SILICON	ROHM	
	Q710	2SA1038(S,E)	SILICON	ROHM	
	Q711	2SC2389(S,E)	SILICON	ROHM	
	Q712	2SC2389(S,E)	SILICON	ROHM	

⚠ : SAFETY PARTS

Diodes

⚠	ITEM	PART NUMBER	DESCRIPTION		AREA
				MAKER	
	D701	1SS133	SILICON	ROHM	
	D702	1SS133	SILICON	ROHM	
	D703	1SS133	SILICON	ROHM	R
	D703	1SS133	SILICON	ROHM	S
	D704	1SS133	SILICON	ROHM	R
	D704	1SS133	SILICON	ROHM	S
	D705	MTZ22JC	ZENER	ROHM	

⚠ : SAFETY PARTS

Capacitors

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
	C701	EEZ1005-106	10MF	100V	ELECTRO	
	C702	EEZ1005-106	10MF	100V	ELECTRO	
	C703	QCS21HJ-271	270PF	50V	CERAMIC	
	C704	QCS21HJ-271	270PF	50V	CERAMIC	
	C705	QCS21HJ-101	100PF	50V	CERAMIC	
	C706	QCS21HJ-101	100PF	50V	CERAMIC	
	C707	QCY21HK-332	3300PF	50V	CERAMIC	
	C708	QCY21HK-332	3300PF	50V	CERAMIC	
	C709	QCS21HJ-3R0	3PF	50V	CERAMIC	
	C710	QCS21HJ-3R0	3PF	50V	CERAMIC	
	C711	QETB1CM-476	47MF	16V	ELECTRO	
	C712	QETB1CM-476	47MF	16V	ELECTRO	
	C713	QCS32HJ-220	22PF	500V	CERAMIC	
	C714	QCS32HJ-220	22PF	500V	CERAMIC	
	C715	QCS21HJ-121	120PF	50V	CERAMIC	
	C716	QCS21HJ-121	120PF	50V	CERAMIC	
	C717	QFN81HJ-822	8200PF	50V	MYLAR	
	C718	QFN81HJ-822	8200PF	50V	MYLAR	
	C719	QFN81HJ-822	8200PF	50V	MYLAR	
	C720	QFN81HJ-822	8200PF	50V	MYLAR	
	C721	QETB1EM-106	10MF	25V	ELECTRO	

⚠ : SAFETY PARTS

Resistors

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
	R701	QRD167J-222	2.2K	1/6W	CARBON	
	R702	QRD167J-222	2.2K	1/6W	CARBON	
	R703	QRD167J-104	100K	1/6W	CARBON	
	R704	QRD167J-104	100K	1/6W	CARBON	
	R705	QRD167J-202	2K	1/6W	CARBON	
	R706	QRD167J-202	2K	1/6W	CARBON	
	R707	QRD167J-202	2K	1/6W	CARBON	
	R708	QRD167J-202	2K	1/6W	CARBON	
	R709	QRD167J-103	10K	1/6W	CARBON	
	R710	QRD167J-103	10K	1/6W	CARBON	
	R711	QRD167J-182	1.8K	1/6W	CARBON	
	R712	QRD167J-182	1.8K	1/6W	CARBON	
	R713	QRD167J-104	100K	1/6W	CARBON	
	R714	QRD167J-104	100K	1/6W	CARBON	
	R717	QRD167J-101	100	1/6W	CARBON	
	R718	QRD167J-101	100	1/6W	CARBON	
⚠	R719	QRD145J-121S	120	1/4W	UNF.CARBON	
⚠	R720	QRD145J-121S	120	1/4W	UNF.CARBON	
	R723	QRD144J-562S	5.6K	1/4W	CARBON	
	R724	QRD144J-562S	5.6K	1/4W	CARBON	
	R727	QRD144J-472S	4.7K	1/4W	CARBON	
	R728	QRD144J-472S	4.7K	1/4W	CARBON	
	R729	QRD167J-391	390	1/6W	CARBON	
	R730	QRD167J-391	390	1/6W	CARBON	
	R731	QRD167J-152	1.5K	1/6W	CARBON	
	R732	QRD167J-152	1.5K	1/6W	CARBON	
	R733	QRD167J-152	1.5K	1/6W	CARBON	
	R734	QRD167J-152	1.5K	1/6W	CARBON	
	R735	QRD167J-333	33K	1/6W	CARBON	
	R736	QRD167J-333	33K	1/6W	CARBON	
	R737	QRD167J-391	390	1/6W	CARBON	
	R738	QRD167J-391	390	1/6W	CARBON	
	R739	QRD167J-682	6.8K	1/6W	CARBON	
	R740	QRD167J-682	6.8K	1/6W	CARBON	
	R741	QRD167J-682	6.8K	1/6W	CARBON	

⚠ : SAFETY PARTS

Resistors

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
	R742	QRD167J-682	6.8K	1/6W	CARBON	
	R743	QRD167J-511	510	1/6W	CARBON	
	R744	QRD167J-511	510	1/6W	CARBON	
⚠	R745	QRD125J-182	1.8K	1/2W	UNF.CARBON	
	R747	QRD167J-511	510	1/6W	CARBON	
	R748	QRD167J-511	510	1/6W	CARBON	

⚠ : SAFETY PARTS

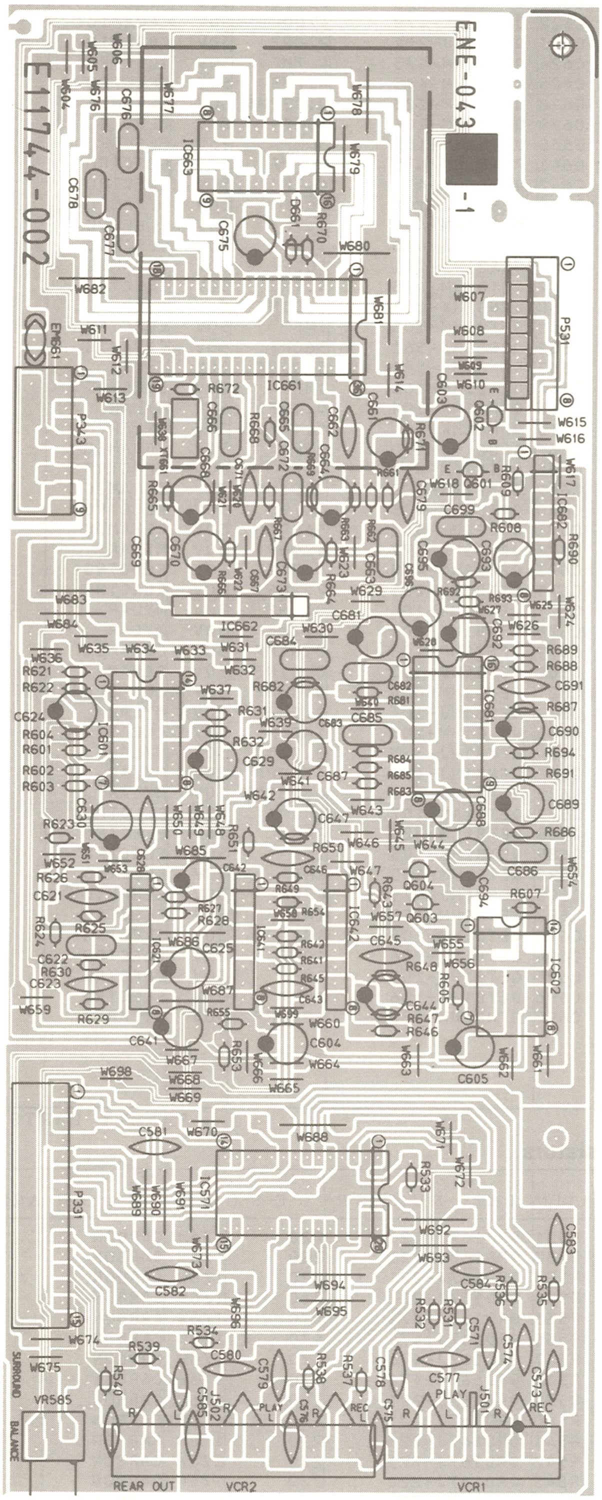
Others

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
		E11219-004	CIRCUIT BOARD	Q
		E11219-004	CIRCUIT BOARD	R
		E11219-004	CIRCUIT BOARD	S
	P701	EMV5101-012B	PLUG ASSY	

⚠ : SAFETY PARTS

■ ENE-043☐ Digital Surround PC Board Ass'y

Note: ENE-043☐ varies according to the areas employed. See note (1) when placing an order.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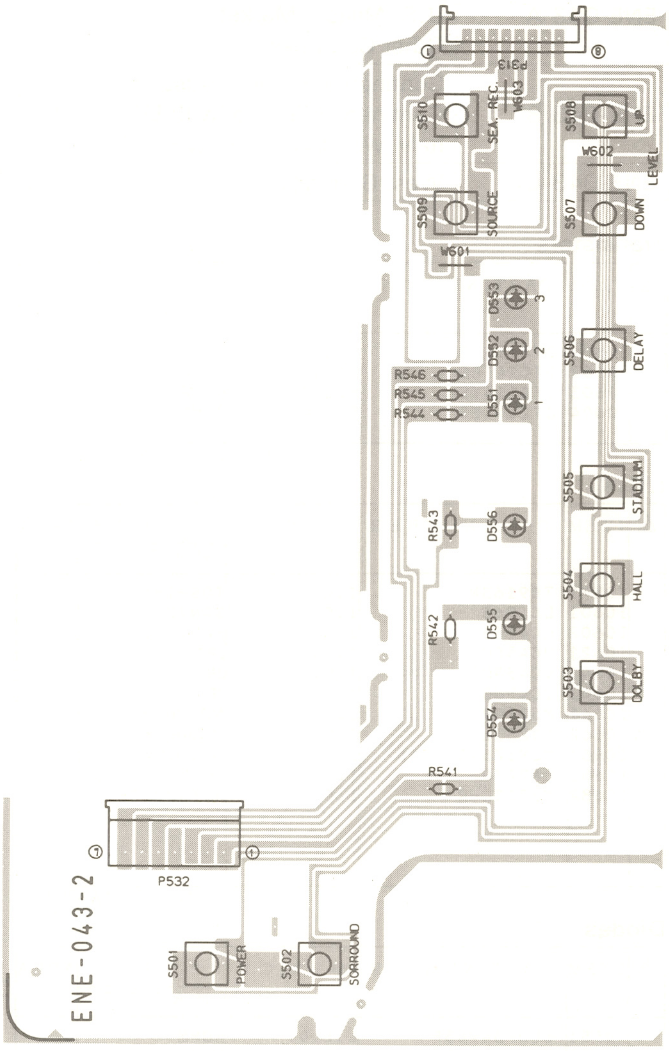
IC661
IC662
IC601
IC681
IC682
IC621
IC641
IC642
IC571
IC602
P531
P343
P331
VR585
SURROUND BALANCE
J502
J501
REAR OUT
VCR2
VCR1
PLAY
REC
R
L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UP
W602
LEVEL
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DOWN
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R546
R545
R544
S506
DELAY
S505
STADIUM
R543
D556
S504
HALL
R542
D555
S503
DOLBY
D554
R541
P532
ENE-043-2
S501
POWER
S502
SURROUND

Note (1)

PC Board Ass'y	Designated Areas
ENE-043 A	U.S.A., Canada, U.S. Military Market, Other Countries
ENE-043 B	Continental Europe, Australia, Continental Europe (with LW), Italy (with LW), U.K. (with LW)
ENE-043 C	West Germany

Transistors

⚠	ITEM	PART NUMBER	DESCRIPTION		AREA
				MAKER	
	Q601	DTA114YS	SILICON	ROHM	
	Q602	DTC144ES	SILICON	ROHM	
	Q603	DTA114YS	SILICON	ROHM	
	Q604	DTC144ES	SILICON	ROHM	

⚠ : SAFETY PARTS

I.C.s

⚠	ITEM	PART NUMBER	DESCRIPTION		AREA
				MAKER	
	IC571	TC9163N	I.C.	TOSHIBA	
	IC601	LC4966	I.C.	SANYO	
	IC602	LC4966	I.C.	SANYO	
	IC621	VC4580L	I.C.	JRC	
	IC641	VC4580L	I.C.	JRC	
	IC642	VC4580L	I.C.	JRC	
	IC661	M50199P	I.C.	MITSUBISHI	
	IC662	M5233L	I.C.	MITSUBISHI	
	IC663	MSM3764A-12RS	I.C.	MITSUBISHI	
	IC681	LA2730	I.C.	SANYO	
	IC682	M5218L-R	I.C.	MITSUBISHI	

⚠ : SAFETY PARTS

Diodes

⚠	ITEM	PART NUMBER	DESCRIPTION		AREA
				MAKER	
	D551	SLH-34VC3F	L.E.D.	ROHM	
	D552	SLH-34VC3F	L.E.D.	ROHM	
	D553	SLH-34VC3F	L.E.D.	ROHM	
	D554	SLH-34DC3F	L.E.D.	ROHM	
	D555	SLH-34DC3F	L.E.D.	ROHM	
	D556	SLH-34DC3F	L.E.D.	ROHM	
	D661	1SS133	SILICON	ROHM	
	D662	MTZ10JC	ZENER	ROHM	
	D663	HTZ10JC	ZENER	ROHM	

⚠ : SAFETY PARTS

Capacitors

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
	C571	QCF21HP-223	0.022MF	50V	CERAMIC	
	C573	QCS21HJ-331	330PF	50V	CERAMIC	C
	C574	QCS21HJ-331	330PF	50V	CERAMIC	C
	C575	QCS21HJ-331	330PF	50V	CERAMIC	C
	C576	QCS21HJ-331	330PF	50V	CERAMIC	C
	C577	QCS21HJ-101	100PF	50V	CERAMIC	C
	C578	QCS21HJ-101	100PF	50V	CERAMIC	C
	C579	QCS21HJ-101	100PF	50V	CERAMIC	C
	C580	QCS21HJ-101	100PF	50V	CERAMIC	C
	C581	QCF21HP-223	0.022MF	50V	CERAMIC	
	C582	QCF21HP-223	0.022MF	50V	CERAMIC	
	C585	QCF21HP-223	0.022MF	50V	CERAMIC	
	C603	QETB1AM-107	100MF	10V	ELECTRO	
	C604	QETB1EM-106	10MF	25V	ELECTRO	
	C605	QETB1EM-106	10MF	25V	ELECTRO	

⚠ : SAFETY PARTS

Capacitors

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
	C621	QFN81HK-333	0.033MF	50V	MYLAR	
	C622	QCY21HK-472	4700PF	50V	CERAMIC	
	C623	QCS21HJ-271	270PF	50V	CERAMIC	
	C624	QETB1HM-475	4.7MF	50V	ELECTRO	
	C625	QETB1HM-475	4.7MF	50V	ELECTRO	
	C628	QCF21HP-223	0.022MF	50V	CERAMIC	
	C629	QETB1EM-106	10MF	25V	ELECTRO	
	C630	QETB1EM-106	10MF	25V	ELECTRO	
	C641	QETB1HM-475	4.7MF	50V	ELECTRO	
	C642	QETB1HM-475	4.7MF	50V	ELECTRO	
	C643	QCS21HJ-100	10PF	50V	CERAMIC	
	C644	QETB1HM-475	4.7MF	50V	ELECTRO	
	C645	QCS21HJ-470	47PF	50V	CERAMIC	
	C646	QCS21HJ-101	100PF	50V	CERAMIC	
	C647	QETB1HM-475	4.7MF	50V	ELECTRO	
	C660	QFN81HK-103	0.01MF	50V	MYLAR	
	C661	QETB1HM-105	1MF	50V	ELECTRO	
	C662	QCS21HJ-561	560PF	50V	CERAMIC	
	C663	QFN81HK-562	5600PF	50V	MYLAR	
	C664	QETB1HM-105	1MF	50V	ELECTRO	
	C665	QFN81HK-104	0.1MF	50V	MYLAR	
	C666	QFN81HK-104	0.1MF	50V	MYLAR	
	C667	QCS21HJ-150	15PF	50V	CERAMIC	
	C668	QETB1AM-476	47MF	10V	ELECTRO	
	C669	QCF21HP-103	0.01MF	50V	CERAMIC	
	C670	QETB1HM-475	4.7MF	50V	ELECTRO	
	C671	QCS21HJ-561	560PF	50V	CERAMIC	
	C672	QFN81HJ-472	4700PF	50V	MYLAR	
	C673	QETB1HM-475	4.7MF	50V	ELECTRO	
	C675	QETB1HM-225	2.2MF	50V	ELECTRO	
	C677	QFN81HK-104	0.1MF	50V	MYLAR	
	C678	QFN81HK-104	0.1MF	50V	MYLAR	
	C679	QCF21HP-103	0.01MF	50V	CERAMIC	
	C680	QCF21HP-103	0.01MF	50V	CERAMIC	
	C681	QEB51HM-334	0.33MF	50V	LLC ELECTR	
	C682	QFN81HJ-104	0.1MF	50V	MYLAR	
	C683	QETB1HM-105	1MF	50V	ELECTRO	
	C684	QFN81HJ-333	0.033MF	50V	MYLAR	
	C685	QFN81HJ-472	4700PF	50V	MYLAR	
	C686	QFN81HJ-333	0.033MF	50V	MYLAR	
	C687	QETB1AM-107	100MF	10V	ELECTRO	
	C688	QETB1CM-226	22MF	16V	ELECTRO	
	C689	QETB1HM-105	1MF	50V	ELECTRO	
	C690	QETB1HM-105	1MF	50V	ELECTRO	
	C691	QCS21HJ-471	470PF	50V	CERAMIC	
	C692	QETB1HM-105	1MF	50V	ELECTRO	
	C693	QETB1HM-105	1MF	50V	ELECTRO	
	C694	QETB1EM-106	10MF	25V	ELECTRO	
	C695	QETB1HM-105	1MF	50V	ELECTRO	
	C696	QETB1EM-106	10MF	25V	ELECTRO	
	C699	QFN81HK-682	6800PF	50V	MYLAR	

⚠ : SAFETY PARTS

Resistors

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
	R531	QRD167J-221	220	1/6W	CARBON	
	R532	QRD167J-221	220	1/6W	CARBON	
	R533	QRD167J-221	220	1/6W	CARBON	
	R534	QRD167J-221	220	1/6W	CARBON	
	R535	QRD167J-471	470	1/6W	CARBON	
	R536	QRD167J-471	470	1/6W	CARBON	
	R537	QRD167J-471	470	1/6W	CARBON	
	R538	QRD167J-471	470	1/6W	CARBON	
	R539	QRD167J-221	220	1/6W	CARBON	
	R540	QRD167J-221	220	1/6W	CARBON	
	R541	QRD167J-221	220	1/6W	CARBON	
	R542	QRD167J-221	220	1/6W	CARBON	
	R543	QRD167J-221	220	1/6W	CARBON	
	R544	QRD167J-221	220	1/6W	CARBON	
	R545	QRD167J-221	220	1/6W	CARBON	
	R546	QRD167J-221	220	1/6W	CARBON	
	R601	QRD167J-563	56K	1/6W	CARBON	
	R602	QRD167J-563	56K	1/6W	CARBON	
	R603	QRD167J-563	56K	1/6W	CARBON	
	R604	QRD167J-563	56K	1/6W	CARBON	
	R605	QRD167J-563	56K	1/6W	CARBON	
	R607	QRD167J-563	56K	1/6W	CARBON	
	R608	QRD167J-333	33K	1/6W	CARBON	
	R609	QRD167J-473	47K	1/6W	CARBON	
	R621	QRD167J-474	470K	1/6W	CARBON	

⚠ : SAFETY PARTS

Resistors

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
	R622	QRD167J-223	22K	1/6W	CARBON	
	R623	QRD167J-273	27K	1/6W	CARBON	
	R624	QRD167J-333	33K	1/6W	CARBON	
	R625	QRD167J-223	22K	1/6W	CARBON	
	R626	QRD167J-273	27K	1/6W	CARBON	
	R627	QRD167J-223	22K	1/6W	CARBON	
	R628	QRD167J-104	100K	1/6W	CARBON	
	R629	QRD167J-154	150K	1/6W	CARBON	
	R630	QRD167J-394	390K	1/6W	CARBON	
	R631	QRD167J-474	470K	1/6W	CARBON	
	R632	QRD167J-474	470K	1/6W	CARBON	
	R641	QRD167J-223	22K	1/6W	CARBON	
	R642	QRD167J-223	22K	1/6W	CARBON	
	R643	QRD167J-223	22K	1/6W	CARBON	
	R645	QRD167J-223	22K	1/6W	CARBON	
	R646	QRD167J-473	47K	1/6W	CARBON	
	R648	QRD167J-823	82K	1/6W	CARBON	
	R649	QRD167J-153	15K	1/6W	CARBON	
	R650	QRD167J-104	100K	1/6W	CARBON	
	R651	QRD167J-103	10K	1/6W	CARBON	
	R653	QRD167J-222	2.2K	1/6W	CARBON	
	R654	QRD167J-222	2.2K	1/6W	CARBON	
	R661	QRD167J-272	2.7K	1/6W	CARBON	
	R662	QRD167J-153	15K	1/6W	CARBON	
	R663	QRD167J-103	10K	1/6W	CARBON	
	R664	QRD167J-153	15K	1/6W	CARBON	
	R665	QRD167J-103	10K	1/6W	CARBON	
	R666	QRD167J-272	2.7K	1/6W	CARBON	
	R667	QRD167J-153	15K	1/6W	CARBON	
	R668	QRD167J-103	10K	1/6W	CARBON	
	R669	QRD167J-153	15K	1/6W	CARBON	
	R670	QRD167J-473	47K	1/6W	CARBON	
	R671	QRD167J-224	220K	1/6W	CARBON	
	R672	QRD167J-105	1M	1/6W	CARBON	
	R681	QRD167J-274	270K	1/6W	CARBON	
	R682	QRD167J-622	6.2K	1/6W	CARBON	
	R683	QRD167J-274	270K	1/6W	CARBON	
	R684	QRD167J-473	47K	1/6W	CARBON	
	R685	QRD167J-332	3.3K	1/6W	CARBON	
	R686	QRD167J-181	180	1/6W	CARBON	
	R687	QRD167J-333	33K	1/6W	CARBON	
	R688	QRD167J-683	68K	1/6W	CARBON	
	R689	QRD167J-223	22K	1/6W	CARBON	
	R690	QRD167J-223	22K	1/6W	CARBON	
	R691	QRD167J-103	10K	1/6W	CARBON	
	R692	QRD167J-104	100K	1/6W	CARBON	
	R693	QRD167J-102	1K	1/6W	CARBON	
	R694	QRD167J-153	15K	1/6W	CARBON	
	VR585	QVAA99W-EF5C	250K		VARIABLE	

⚠ : SAFETY PARTS

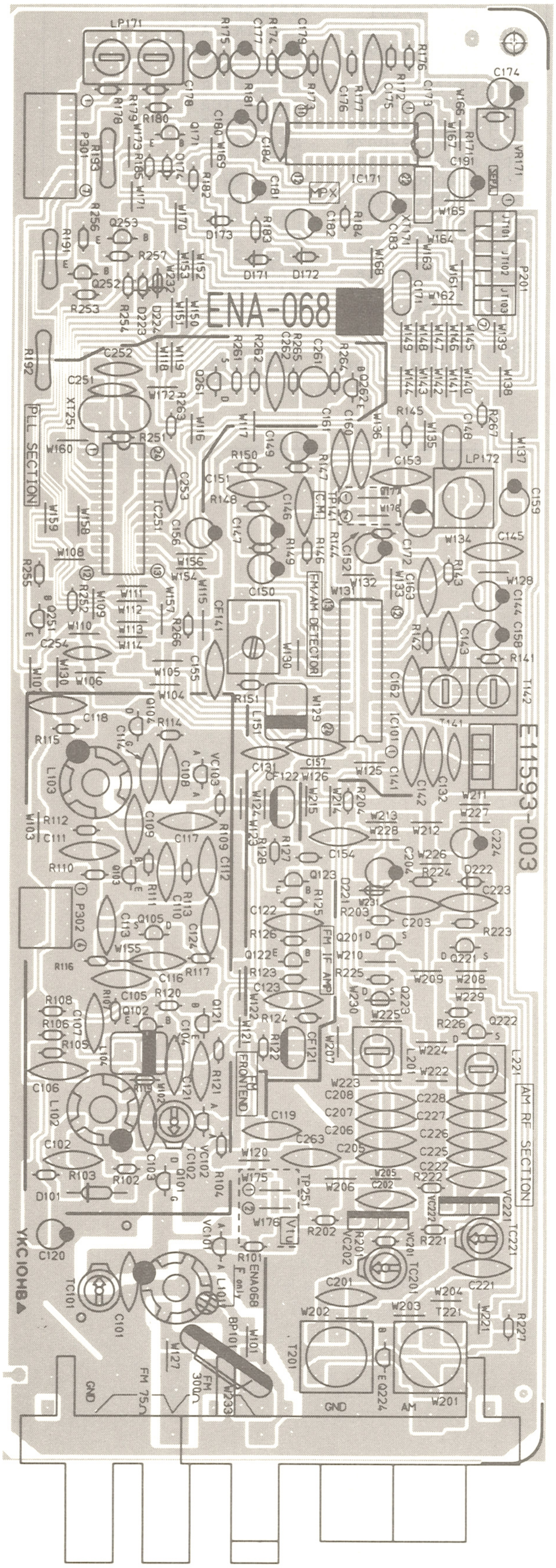
Others

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
		E11744-002	CIRCUIT BOARD	
		E74854-001	SHIELD CASE	
	J501	EMN00TV-405A	4P PIN JACK	
	J502	EMN00TV-602A	6P PIN JACK	
	P313	EMV5120-008	PLUG ASSY	
	P331	EMV7125-015R	CONNECTOR	
	P343	EMV7125-009R	CONNECTOR	
	P531	EMV7112-008	CONNECTOR	
	P532	EMV7112-007R	CONNECTOR	
	S501	ESP0001-018	TACT SWITCH	
	S502	ESP0001-018	TACT SWITCH	
	S503	ESP0001-018	TACT SWITCH	
	S504	ESP0001-018	TACT SWITCH	
	S505	ESP0001-018	TACT SWITCH	
	S506	ESP0001-018	TACT SWITCH	
	S507	ESP0001-018	TACT SWITCH	
	S508	ESP0001-018	TACT SWITCH	
	S509	ESP0001-018	TACT SWITCH	
	S510	ESP0001-018	TACT SWITCH	
	EM661	EQF0601-222	EMI FILTER	
	XT661	ECX0003-280KM	RESONATOR	

⚠ : SAFETY PARTS

■ ENA-068☐ World Link Tuner PC Board Ass'y

Note: ENA-068☐ varies according to the areas employed. See note (1) when placing an order.



Note (1)

PC Board Ass'y	Designated Areas
ENA-068 H	U.S.A., Canada
ENA-068 I	U.S. Military Market & Other Countries
ENA-068 J	Australia
ENA-068 K	Continental Europe
ENA-068 L	Italy (with LW), U.K. (with LW)
ENA-068 M	Continental Europe (with LW)
ENA-068 N	West Germany

Transistors

⚠	ITEM	PART NUMBER	DESCRIPTION	MAKER	AREA
	Q101	2SK606(Q,R)	F.E.T	MATSUSHITA	J
	Q101	2SK606(Q,R)	F.E.T	MATSUSHITA	K
	Q101	2SK606(Q,R)	F.E.T	MATSUSHITA	L
	Q101	2SK606(Q,R)	F.E.T	MATSUSHITA	M
	Q101	2SK606(Q,R)	F.E.T	MATSUSHITA	N
	Q101	2SK606(Q,R,S)	F.E.T	MATSUSHITA	H
	Q101	2SK606(Q,R,S)	F.E.T	MATSUSHITA	I
	Q102	2SC535(B,C)	SILICON	HITACHI	
	Q103	2SC461(C)	SILICON	HITACHI	
	Q104	2SK606(Q,R)	F.E.T	MATSUSHITA	J
	Q104	2SK606(Q,R)	F.E.T	MATSUSHITA	K
	Q104	2SK606(Q,R)	F.E.T	MATSUSHITA	L
	Q104	2SK606(Q,R)	F.E.T	MATSUSHITA	M
	Q104	2SK606(Q,R)	F.E.T	MATSUSHITA	N
	Q104	2SK606(Q,R,S)	F.E.T	MATSUSHITA	H
	Q104	2SK606(Q,R,S)	F.E.T	MATSUSHITA	I
	Q105	2SK606(Q,R)	F.E.T	MATSUSHITA	N
	Q121	2SC461(B,C)	SILICON	HITACHI	
	Q122	2SC535(B,C)	SILICON	HITACHI	
	Q123	2SC461(B,C)	SILICON	HITACHI	
	Q171	DTC114YS	SILICON	ROHM	
	Q201	2SK301(Q,R)	F.E.T	MATSUSHITA	
	Q221	2SK301(Q,R)	F.E.T	MATSUSHITA	L
	Q221	2SK301(Q,R)	F.E.T	MATSUSHITA	M
	Q222	2SK301(P,Q)	F.E.T	MATSUSHITA	L
	Q222	2SK301(P,Q)	F.E.T	MATSUSHITA	M
	Q223	2SK301(P,Q)	F.E.T	MATSUSHITA	L
	Q223	2SK301(P,Q)	F.E.T	MATSUSHITA	M
	Q224	2SD1302(S,T)	SILICON	MATSUSHITA	L
	Q224	2SD1302(S,T)	SILICON	MATSUSHITA	M
	Q251	2SA564A(R,S)	SILICON	MATSUSHITA	
	Q252	2SA564A(R,S)	SILICON	MATSUSHITA	
	Q253	2SA564A(R,S)	SILICON	MATSUSHITA	L
	Q253	2SA564A(R,S)	SILICON	MATSUSHITA	M
	Q261	2SK301(Q1)	F.E.T	MATSUSHITA	
	Q262	2SC458(D)	SILICON	HITACHI	

⚠ : SAFETY PARTS

I.C.s

⚠	ITEM	PART NUMBER	DESCRIPTION	MAKER	AREA
	IC101	LA1266A	I.C.	SANYO	
	IC171	LA3401	I.C.	SANYO	
	IC251	LC7217	I.C.	SANYO	

⚠ : SAFETY PARTS

Diodes

⚠	ITEM	PART NUMBER	DESCRIPTION		AREA
				MAKER	
	D101	1SS108	SILICON	HITACHI	H
	D101	1SS108	SILICON	HITACHI	I
	D101	1SS108	SILICON	HITACHI	J
	D101	1SS108	SILICON	HITACHI	K
	D101	1SS108	SILICON	HITACHI	L
	D101	1SS108	SILICON	HITACHI	M
	D171	1SS119	SILICON	HITACHI	
	D172	1SS119	SILICON	HITACHI	
	D173	1SS119	SILICON	HITACHI	
	D174	1SS119	SILICON	HITACHI	
	D221	1SS119	SILICON	HITACHI	L
	D221	1SS119	SILICON	HITACHI	M
	D222	1SS119	SILICON	HITACHI	L
	D222	1SS119	SILICON	HITACHI	M
	D223	1SS119	SILICON	HITACHI	L
	D223	1SS119	SILICON	HITACHI	M
	D224	1SS119	SILICON	HITACHI	L
	D224	1SS119	SILICON	HITACHI	M
	VC101	SVC202(AB)	VARICAP	SANYO	
	VC102	SVC202(AB)	VARICAP	SANYO	
	VC103	SVC202(AB)	VARICAP	SANYO	
	VC201	KV1236Z	VARICAP	TOKO	
	VC202	KV1236Z	VARICAP	TOKO	
	VC221	KV1236Z	VARICAP	TOKO	L
	VC221	KV1236Z	VARICAP	TOKO	M
	VC222	KV1236Z	VARICAP	TOKO	L
	VC222	KV1236Z	VARICAP	TOKO	M

⚠ : SAFETY PARTS

Resistors

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
	R101	QRD167J-473	47K	1/6W	CARBON	
	R102	QRD167J-330	33	1/6W	CARBON	
	R103	QRD167J-221	220	1/6W	CARBON	
	R104	QRD167J-473	47K	1/6W	CARBON	
	R105	QRD167J-332	3.3K	1/6W	CARBON	
	R106	QRD167J-223	22K	1/6W	CARBON	
	R107	QRD167J-102	1K	1/6W	CARBON	
	R108	QRD167J-102	1K	1/6W	CARBON	
	R109	QRD167J-562	5.6K	1/6W	CARBON	
	R110	QRD167J-561	560	1/6W	CARBON	
	R111	QRD167J-103	10K	1/6W	CARBON	
	R112	QRD167J-682	6.8K	1/6W	CARBON	
	R113	QRD167J-222	2.2K	1/6W	CARBON	
	R114	QRD167J-224	220K	1/6W	CARBON	
	R115	QRD167J-331	330	1/6W	CARBON	
	R116	QRD167J-224	220K	1/6W	CARBON	N
	R117	QRD167J-331	330	1/6W	CARBON	N
	R120	QRD167J-330	33	1/6W	CARBON	
	R121	QRD167J-332	3.3K	1/6W	CARBON	
	R122	QRD167J-221	220	1/6W	CARBON	
	R123	QRD167J-272	2.7K	1/6W	CARBON	
	R124	QRD167J-391	390	1/6W	CARBON	
	R125	QRD167J-102	1K	1/6W	CARBON	
	R126	QRD167J-681	680	1/6W	CARBON	
	R127	QRD167J-332	3.3K	1/6W	CARBON	
	R128	QRD167J-221	220	1/6W	CARBON	
	R141	QRD167J-822	8.2K	1/6W	CARBON	
	R142	QRD167J-102	1K	1/6W	CARBON	
	R143	QRD167J-183	18K	1/6W	CARBON	H
	R143	QRD167J-333	33K	1/6W	CARBON	I
	R143	QRD167J-333	33K	1/6W	CARBON	J
	R143	QRD167J-333	33K	1/6W	CARBON	K
	R143	QRD167J-333	33K	1/6W	CARBON	L
	R143	QRD167J-333	33K	1/6W	CARBON	M
	R143	QRD167J-333	33K	1/6W	CARBON	N
	R144	QRD167J-561	560	1/6W	CARBON	
	R145	QRD167J-103	10K	1/6W	CARBON	H
	R145	QRD167J-103	10K	1/6W	CARBON	I
	R145	QRD167J-333	33K	1/6W	CARBON	J
	R145	QRD167J-333	33K	1/6W	CARBON	K
	R145	QRD167J-333	33K	1/6W	CARBON	L
	R145	QRD167J-333	33K	1/6W	CARBON	M
	R145	QRD167J-333	33K	1/6W	CARBON	N
	R146	QRD167J-221	220	1/6W	CARBON	
	R147	QRD167J-103	10K	1/6W	CARBON	

⚠ : SAFETY PARTS

Resistors

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
	R148	QRD167J-223	22K	1/6W	CARBON	
	R149	QRD167J-473	47K	1/6W	CARBON	
	R150	QRD167J-103	10K	1/6W	CARBON	
	R151	QRD167J-334	330K	1/6W	CARBON	
	R171	QRD167J-393	39K	1/6W	CARBON	H
	R171	QRD167J-393	39K	1/6W	CARBON	I
	R172	QRD167J-134	130K	1/6W	CARBON	H
	R172	QRD167J-134	130K	1/6W	CARBON	I
	R172	QRD167J-184	180K	1/6W	CARBON	J
	R172	QRD167J-184	180K	1/6W	CARBON	K
	R172	QRD167J-184	180K	1/6W	CARBON	L
	R172	QRD167J-184	180K	1/6W	CARBON	M
	R172	QRD167J-184	180K	1/6W	CARBON	N
	R173	QRD167J-134	130K	1/6W	CARBON	H
	R173	QRD167J-134	130K	1/6W	CARBON	I
	R173	QRD167J-184	180K	1/6W	CARBON	J
	R173	QRD167J-184	180K	1/6W	CARBON	K
	R173	QRD167J-184	180K	1/6W	CARBON	L
	R173	QRD167J-184	180K	1/6W	CARBON	M
	R173	QRD167J-184	180K	1/6W	CARBON	N
	R174	QRD167J-332	3.3K	1/6W	CARBON	
	R175	QRD167J-332	3.3K	1/6W	CARBON	
	R176	QRD167J-184	180K	1/6W	CARBON	H
	R176	QRD167J-184	180K	1/6W	CARBON	I
	R176	QRD167J-274	270K	1/6W	CARBON	J
	R176	QRD167J-274	270K	1/6W	CARBON	K
	R176	QRD167J-274	270K	1/6W	CARBON	L
	R176	QRD167J-274	270K	1/6W	CARBON	M
	R176	QRD167J-274	270K	1/6W	CARBON	N
	R177	QRD167J-184	180K	1/6W	CARBON	H
	R177	QRD167J-184	180K	1/6W	CARBON	I
	R177	QRD167J-274	270K	1/6W	CARBON	J
	R177	QRD167J-274	270K	1/6W	CARBON	K
	R177	QRD167J-274	270K	1/6W	CARBON	L
	R177	QRD167J-274	270K	1/6W	CARBON	M
	R177	QRD167J-274	270K	1/6W	CARBON	N
	R178	QRD167J-682	6.8K	1/6W	CARBON	
	R179	QRD167J-682	6.8K	1/6W	CARBON	
	R180	QRD167J-103	10K	1/6W	CARBON	
	R181	QRD167J-103	10K	1/6W	CARBON	
	R182	QRD167J-103	10K	1/6W	CARBON	
	R183	QRD167J-103	10K	1/6W	CARBON	
	R184	QRD167J-562	5.6K	1/6W	CARBON	
	R185	QRD167J-562	5.6K	1/6W	CARBON	
⚠	R191	QRD14CJ-680S	68	1/4W	UNF.CARBON	H
⚠	R191	QRD14CJ-680S	68	1/4W	UNF.CARBON	I
⚠	R191	QRZ0077-680	68	1/4W	FUSIBLE	J
⚠	R191	QRZ0077-680	68	1/4W	FUSIBLE	K
⚠	R191	QRZ0077-680	68	1/4W	FUSIBLE	L
⚠	R191	QRZ0077-680	68	1/4W	FUSIBLE	M
⚠	R191	QRZ0077-680	68	1/4W	FUSIBLE	N
⚠	R192	QRD14CJ-680S	68	1/4W	UNF.CARBON	H
⚠	R192	QRD14CJ-680S	68	1/4W	UNF.CARBON	I
⚠	R192	QRZ0077-680	68	1/4W	FUSIBLE	J
⚠	R192	QRZ0077-680	68	1/4W	FUSIBLE	K
⚠	R192	QRZ0077-680	68	1/4W	FUSIBLE	L
⚠	R192	QRZ0077-680	68	1/4W	FUSIBLE	M
⚠	R192	QRZ0077-680	68	1/4W	FUSIBLE	N
⚠	R193	QRD14CJ-680S	68	1/4W	UNF.CARBON	H
⚠	R193	QRD14CJ-680S	68	1/4W	UNF.CARBON	I
⚠	R193	QRZ0077-680	68	1/4W	FUSIBLE	J
⚠	R193	QRZ0077-680	68	1/4W	FUSIBLE	K
⚠	R193	QRZ0077-680	68	1/4W	FUSIBLE	L
⚠	R193	QRZ0077-680	68	1/4W	FUSIBLE	M
⚠	R193	QRZ0077-680	68	1/4W	FUSIBLE	N
	R201	QRD167J-103	10K	1/6W	CARBON	
	R202	QRD167J-473	47K	1/6W	CARBON	
	R203	QRD167J-331	330	1/6W	CARBON	
	R204	QRD167J-330	33	1/6W	CARBON	
	R221	QRD167J-103	10K	1/6W	CARBON	L
	R221	QRD167J-103	10K	1/6W	CARBON	M
	R222	QRD167J-473	47K	1/6W	CARBON	L
	R222	QRD167J-473	47K	1/6W	CARBON	M
	R223	QRD167J-331	330	1/6W	CARBON	L
	R223	QRD167J-331	330	1/6W	CARBON	M
	R224	QRD167J-103	10K	1/6W	CARBON	L
	R224	QRD167J-103	10K	1/6W	CARBON	M
	R225	QRD167J-103	10K	1/6W	CARBON	L
	R225	QRD167J-103	10K	1/6W	CARBON	M
	R226	QRD167J-103	10K	1/6W	CARBON	L
	R226	QRD167J-103	10K	1/6W	CARBON	M
	R227	QRD167J-472	4.7K	1/6W	CARBON	L
	R227	QRD167J-472	4.7K	1/6W	CARBON	M
	R251	QRD167J-473	47K	1/6W	CARBON	
	R252	QRD167J-103	10K	1/6W	CARBON	

⚠ : SAFETY PARTS

Resistors

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
	R253	QRD167J-103	10K	1/6W	CARBON	
	R254	QRD167J-103	10K	1/6W	CARBON	L
	R254	QRD167J-103	10K	1/6W	CARBON	M
	R255	QRD167J-473	47K	1/6W	CARBON	
	R256	QRD167J-473	47K	1/6W	CARBON	
	R257	QRD167J-473	47K	1/6W	CARBON	L
	R257	QRD167J-473	47K	1/6W	CARBON	M
	R261	QRD167J-222	2.2K	1/6W	CARBON	
	R262	QRD167J-271	270	1/6W	CARBON	
	R263	QRD167J-103	10K	1/6W	CARBON	H
	R263	QRD167J-103	10K	1/6W	CARBON	I
	R263	QRD167J-103	10K	1/6W	CARBON	J
	R263	QRD167J-103	10K	1/6W	CARBON	K
	R263	QRD167J-103	10K	1/6W	CARBON	N
	R263	QRD167J-222	2.2K	1/6W	CARBON	L
	R263	QRD167J-222	2.2K	1/6W	CARBON	M
	R264	QRD167J-472	4.7K	1/6W	CARBON	
	R265	QRD167J-332	3.3K	1/6W	CARBON	H
	R265	QRD167J-332	3.3K	1/6W	CARBON	I
	R265	QRD167J-332	3.3K	1/6W	CARBON	J
	R265	QRD167J-332	3.3K	1/6W	CARBON	K
	R265	QRD167J-332	3.3K	1/6W	CARBON	N
	R265	QRD167J-822	8.2K	1/6W	CARBON	L
	R265	QRD167J-822	8.2K	1/6W	CARBON	M
	R266	QRD167J-222	2.2K	1/6W	CARBON	
	R267	QRD167J-154	150K	1/6W	CARBON	
	VR171	QVZ3518-104	100K	0.1W	VARIABLE	J
	VR171	QVZ3518-104	100K	0.1W	VARIABLE	K
	VR171	QVZ3518-104	100K	0.1W	VARIABLE	L
	VR171	QVZ3518-104	100K	0.1W	VARIABLE	M
	VR171	QVZ3518-104	100K	0.1W	VARIABLE	N

⚠ : SAFETY PARTS

Capacitors

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
	C101	QCS21HJ-3R0	3PF	50V	CERAMIC	N
	C102	QCF21HP-102	1000PF	50V	CERAMIC	
	C103	QCS21HJ-5R0	5PF	50V	CERAMIC	
	C104	QCS21HJ-2R0	2PF	50V	CERAMIC	
	C105	QCS21HJ-2R0	2PF	50V	CERAMIC	H
	C105	QCS21HJ-2R0	2PF	50V	CERAMIC	I
	C105	QCS21HJ-2R0	2PF	50V	CERAMIC	J
	C105	QCS21HJ-2R0	2PF	50V	CERAMIC	K
	C105	QCS21HJ-2R0	2PF	50V	CERAMIC	L
	C105	QCS21HJ-2R0	2PF	50V	CERAMIC	M
	C106	QCS21HJ-151	150PF	50V	CERAMIC	
	C107	QCF21HP-103	0.01MF	50V	CERAMIC	
	C108	QCT26TH-100	10PF	50V	CERAMIC	
	C109	QCT26CH-7R0	7PF	50V	CERAMIC	
	C110	QCT26CH-220	22PF	50V	CERAMIC	
	C111	QCF21HP-103	0.01MF	50V	CERAMIC	
	C112	QCT26CH-100	10PF	50V	CERAMIC	
	C113	QCS21HJ-2R0	2PF	50V	CERAMIC	H
	C113	QCS21HJ-2R0	2PF	50V	CERAMIC	I
	C113	QCS21HJ-2R0	2PF	50V	CERAMIC	J
	C113	QCS21HJ-2R0	2PF	50V	CERAMIC	K
	C113	QCS21HJ-2R0	2PF	50V	CERAMIC	L
	C113	QCS21HJ-2R0	2PF	50V	CERAMIC	M
	C113	QCS21HJ-4R0	4PF	50V	CERAMIC	N
	C114	QCT26CH-2R0	2PF	50V	CERAMIC	
	C116	QCS21HJ-4R0	4PF	50V	CERAMIC	N
	C117	QCC21EM-473	0.047MF	25V	CERAMIC	
	C118	QCF21HP-103	0.01MF	50V	CERAMIC	
	C119	QCS21HJ-101	100PF	50V	CERAMIC	N
	C120	QETB1EM-226	22MF	25V	ELECTRO	
	C121	QCS21HJ-220	22PF	50V	CERAMIC	
	C122	QCF21HP-223	0.022MF	50V	CERAMIC	
	C123	QCF21HP-223	0.022MF	50V	CERAMIC	
	C131	QCS21HJ-101	100PF	50V	CERAMIC	
	C132	QCZ0205-155	1.5MF	25V	CERAMIC	
	C141	QCF21HP-223	0.022MF	50V	CERAMIC	
	C142	QCC21EM-223	0.022MF	25V	CERAMIC	
	C143	QCF21HP-223	0.022MF	50V	CERAMIC	
	C144	QETB1HM-105	1MF	50V	ELECTRO	
	C145	QCS21HJ-101	100PF	50V	CERAMIC	J
	C145	QCS21HJ-101	100PF	50V	CERAMIC	K
	C145	QCS21HJ-101	100PF	50V	CERAMIC	L
	C145	QCS21HJ-101	100PF	50V	CERAMIC	M
	C145	QCS21HJ-101	100PF	50V	CERAMIC	N
	C145	QCS21HJ-221	220PF	50V	CERAMIC	H

⚠ : SAFETY PARTS

Capacitors

⚠	ITEM	PART NUMBER	DESCRIPTION			AREA
	C145	QCS21HJ-221	220PF	50V	CERAMIC	I
	C146	QCF21HP-223	0.022MF	50V	CERAMIC	
	C147	QETB1HM-225	2.2MF	50V	ELECTRO	
	C148	QFN81HK-332	3300PF	50V	MYLAR	
	C149	QETB1HM-225	2.2MF	50V	ELECTRO	
	C150	QETB1HM-475	4.7MF	50V	ELECTRO	
	C151	QCF21HP-223	0.022MF	50V	CERAMIC	
	C152	QETB1EM-106	10MF	25V	ELECTRO	
	C153	QCF21HP-223	0.022MF	50V	CERAMIC	
	C154	QCF21HP-223	0.022MF	50V	CERAMIC	
	C155	QCF21HP-223	0.022MF	50V	CERAMIC	
	C156	QETB1EM-106	10MF	25V	ELECTRO	
	C157	QCY21HK-102	1000PF	50V	CERAMIC	
	C158	QETB1EM-226	22MF	25V	ELECTRO	
	C159	QETB1HM-475	4.7MF	50V	ELECTRO	
	C160	QCS21HJ-101	100PF	50V	CERAMIC	
	C161	QCS21HJ-101	100PF	50V	CERAMIC	
	C162	QCC21EM-223	0.022MF	25V	CERAMIC	
	C163	QCF21HP-223	0.022MF	50V	CERAMIC	
	C171	QFN81HK-223	0.022MF	50V	MYLAR	J
	C171	QFN81HK-223	0.022MF	50V	MYLAR	K
	C171	QFN81HK-223	0.022MF	50V	MYLAR	L
	C171	QFN81HK-223	0.022MF	50V	MYLAR	M
	C171	QFN81HK-223	0.022MF	50V	MYLAR	N
	C171	QFN81HK-333	0.033MF	50V	MYLAR	H
	C171	QFN81HK-333	0.033MF	50V	MYLAR	I
	C172	QETB1EM-106	10MF	25V	ELECTRO	
	C173	QFN81HK-473	0.047MF	50V	MYLAR	
	C174	QETB1EM-106	10MF	25V	ELECTRO	
	C175	QCS21HJ-271	270PF	50V	CERAMIC	J
	C175	QCS21HJ-271	270PF	50V	CERAMIC	K
	C175	QCS21HJ-271	270PF	50V	CERAMIC	L
	C175	QCS21HJ-271	270PF	50V	CERAMIC	M
	C175	QCS21HJ-271	270PF	50V	CERAMIC	N
	C175	QCS21HJ-561	560PF	50V	CERAMIC	H
	C175	QCS21HJ-561	560PF	50V	CERAMIC	I
	C176	QCS21HJ-271	270PF	50V	CERAMIC	J
	C176	QCS21HJ-271	270PF	50V	CERAMIC	K
	C176	QCS21HJ-271	270PF	50V	CERAMIC	L
	C176	QCS21HJ-271	270PF	50V	CERAMIC	M
	C176	QCS21HJ-271	270PF	50V	CERAMIC	N
	C176	QCS21HJ-561	560PF	50V	CERAMIC	H
	C176	QCS21HJ-561	560PF	50V	CERAMIC	I
	C177	QETB1HM-225	2.2MF	50V	ELECTRO	
	C178	QETB1HM-225	2.2MF	50V	ELECTRO	
	C179	QETB1HM-225	2.2MF	50V	ELECTRO	
	C180	QETB1HM-105	1MF	50V	ELECTRO	
	C181	QETB1HM-105	1MF	50V	ELECTRO	
	C182	QETB1HM-474	0.47MF	50V	ELECTRO	
	C183	QETB1HM-225	2.2MF	50V	ELECTRO	
	C184	QCY21HK-102	1000PF	50V	CERAMIC	
	C191	QETB1EM-226	22MF	25V	ELECTRO	
	C202	QCC21EM-223	0.022MF	25V	CERAMIC	
	C203	QCS21HJ-561	560PF	50V	CERAMIC	
	C204	QETB1EM-226	22MF	25V	ELECTRO	
	C205	QCT26CH-100	10PF	50V	CERAMIC	
	C206	QCT26CH-100	10PF	50V	CERAMIC	
	C207	QCT26CH-221	220PF	50V	CERAMIC	
	C208	QCT26CH-271	270PF	50V	CERAMIC	
	C221	QCS21HJ-330	33PF	50V	CERAMIC	L
	C221	QCS21HJ-330	33PF	50V	CERAMIC	M
	C222	QCC21EM-473	0.047MF	25V	CERAMIC	L
	C222	QCC21EM-473	0.047MF	25V	CERAMIC	M
	C223	QCF21HP-103	0.01MF	50V	CERAMIC	L
	C223	QCF21HP-103	0.01MF	50V	CERAMIC	M
	C224	QETB1EM-226	22MF	25V	ELECTRO	L
	C224	QETB1EM-226	22MF	25V	ELECTRO	M
	C225	QCT26CH-680	68PF	50V	CERAMIC	L
	C225	QCT26CH-680	68PF	50V	CERAMIC	M
	C226	QCT26CH-7R0	7PF	50V	CERAMIC	L
	C226	QCT26CH-7R0	7PF	50V	CERAMIC	M
	C227	QCT26CH-150	15PF	50V	CERAMIC	L
	C227	QCT26CH-150	15PF	50V	CERAMIC	M
	C228	QCT26CH-151	150PF	50V	CERAMIC	L
	C228	QCT26CH-151	150PF	50V	CERAMIC	M
	C251	QCS21HJ-180	18PF	50V	CERAMIC	
	C252	QCS21HJ-180	18PF	50V	CERAMIC	
	C253	QCC21EM-473	0.047MF	25V	CERAMIC	
	C254	QCF21HP-103	0.01MF	50V	CERAMIC	
	C261	QEN51HM-474	0.47MF	50V	NON POLE	
	C262	QCY21HK-102	1000PF	50V	CERAMIC	
	C263	QCF21HP-223	0.022MF	50V	CERAMIC	
	TC101	ENZ1003-003			TRIMMER	
	TC102	ENZ1003-003			TRIMMER	
	TC201	ENZ1003-006			TRIMMER	
	TC221	ENZ1003-006			TRIMMER	L
	TC221	ENZ1003-006			TRIMMER	M

⚠ : SAFETY PARTS

Others

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
		EMB41YV-301K	ANTENNA TERMINAL	
		EMB41YV-501K	ANTENNA TERMINAL	H
		EMB41YV-501K	ANTENNA TERMINAL	I
		EMB41YV-501K	ANTENNA TERMINAL	J
		EMB41YV-501K	ANTENNA TERMINAL	K
		EMB41YV-501K	ANTENNA TERMINAL	L
		E11593-003	CIRCUIT BOARD	
		E304645-001	SHIELD CASE	H
		E304645-001	SHIELD CASE	I
		E304645-001	SHIELD CASE	J
		E304645-001	SHIELD CASE	K
		E304645-001	SHIELD CASE	L
		E304645-001	SHIELD CASE	M
		E304645-002	SHIELD CASE	N
		E74134-001	SHIELD CASE	N
	L101	EQR2306-014	FM RF COIL	H
	L101	EQR2306-014	FM RF COIL	I
	L101	EQR2306-014	FM RF COIL	J
	L101	EQR2306-014	FM RF COIL	K
	L101	EQR2306-014	FM RF COIL	L
	L101	EQR2306-014	FM RF COIL	M
	L101	EQR2306-016	FM RF COIL	N
	L102	EQR2106-014	RF COIL	
	L103	EQR2406-004	FM OSC COIL	
	L104	EQL3001-1R5K	INDUCTOR	
	L105	EQL3001-1R5K	INDUCTOR	N
	L151	EQL3001-102K	INDUCTOR	
	L201	EQR1207-009	MW OSC COIL	
	L221	EQR1307-002	LW OSC COIL	L
	L221	EQR1307-002	LW OSC COIL	M

⚠ : SAFETY PARTS

Others

⚠	ITEM	PART NUMBER	DESCRIPTION	AREA
	P201	EMV7112-007	CONNECTOR	
	P202	EMV7112-003R	CONNECTOR	
	P301	EMV7125-007R	CONNECTOR	
	P302	EMV7125-004R	CONNECTOR	
	T141	EQT2140-012	I.F. TRANSFORMER	
	T142	EQT2140-013	I.F. TRANSFORMER	
	T201	EQR1111-006	AM RF COIL	
	T221	EQR1111-005	AM RF COIL	L
	T221	EQR1111-005	AM RF COIL	M
	BP101	EQF0201-006	BAND PASS FILTER	N
	CF121	ECB2118-001R	CERAMIC FILTER	J
	CF121	ECB2118-001R	CERAMIC FILTER	K
	CF121	ECB2118-001R	CERAMIC FILTER	L
	CF121	ECB2118-001R	CERAMIC FILTER	M
	CF121	ECB2118-001R	CERAMIC FILTER	N
	CF121	ECB2123-001R	CERAMIC FILTER	H
	CF121	ECB2123-001R	CERAMIC FILTER	I
	CF122	ECB2118-001R	CERAMIC FILTER	J
	CF122	ECB2118-001R	CERAMIC FILTER	K
	CF122	ECB2118-001R	CERAMIC FILTER	L
	CF122	ECB2118-001R	CERAMIC FILTER	M
	CF122	ECB2118-001R	CERAMIC FILTER	N
	CF122	ECB2123-001R	CERAMIC FILTER	H
	CF122	ECB2123-001R	CERAMIC FILTER	I
	CF141	ECB1560-006	CERAMIC FILTER	
	LP171	EQF0101-002	LOW PASS FILTER	
	LP172	EQF0102-001	LOW PASS FILTER	N
	XT171	ECX0000-456KR	RESONATOR	
	XT251	ECX0007-200KC	RESONATOR	

⚠ : SAFETY PARTS

Accessories List

⚠	Part Number	Part Name	Q'ty	Description	Areas
	E30580-1473B	Instruction Book	1		J , SJ
	E30580-1434B	Instruction Book	1		Except J , SJ , LBS
	E30580-1434BBS	Instruction Book	1		LBS
	BT20025K	Warranty Card	1		C
	BT20029C	Warranty Card	1	for Australia	A
	BT20048B	Warranty Card	1		J , SJ , P , PG
	BT20060	Warranty Card	1		LBS
	BT20064A	Warranty Card	1		G
	BT20098	Warranty Card	1	for New Zealand	A
	BT20044E	Safety Instruction Sheet	1		J
	BT20046C	Service Information	1		J , SJ , P , PG
	BT20066	EEC Agency	1		G , LBS
	BT20071A	Service Center List	1		C
	EQB4001-012	AM Loop Antena	1		
	E304084-001	Loop Stand	1		
	EWP502-001	Built . in Antena	1		Except G
	E67007-001	Wire Antena Assy	1		G
	AM-4J-2PSA	Battery	2		Except SJ
	UM-3(DJ)-2PSA	Battery	1		SJ
	EMZ2001-007	Adapter	1		LE , LEF
	E74789-001	REM.Plate	1		Except SJ
	E305509-001	Appendix Sheet	1		Except SJ
⚠	QMF51A2-5R0S	Fuse	1		U , PG
⚠	QMF51A2-2R5S	Fuse	1		P
	E67142-T5R0	Fuse Label	1		U , PG
	E67142-T2R5	Fuse Label	1		P
	E6581-4	Envelope	1	for Fuse	U , P , PG
⚠	E04056	Siemens Plug	1		U , PG
	E35497-013	Caution Sheet	1	110V	P
	E35497-015	Caution Sheet	1	220V	U , PG
	RM-SR777	Remote Controle	1		Except SJ
	RM-SR777S	Remote Controle	1		SJ
⚠	EMC0201-001BS	AC Plug	1		LBS
	E43486-165A	Information Sheet	1		LBS
	E43486-340A	Safety Sheet	1		LBS
	E66416-003	Envelope	1		J , SJ
	E41202-2	Envelope	1		Except LBS
	E41202-2B	Envelope	1		LBS
	QZL1008-001	FTZ Information Sheet	1		G

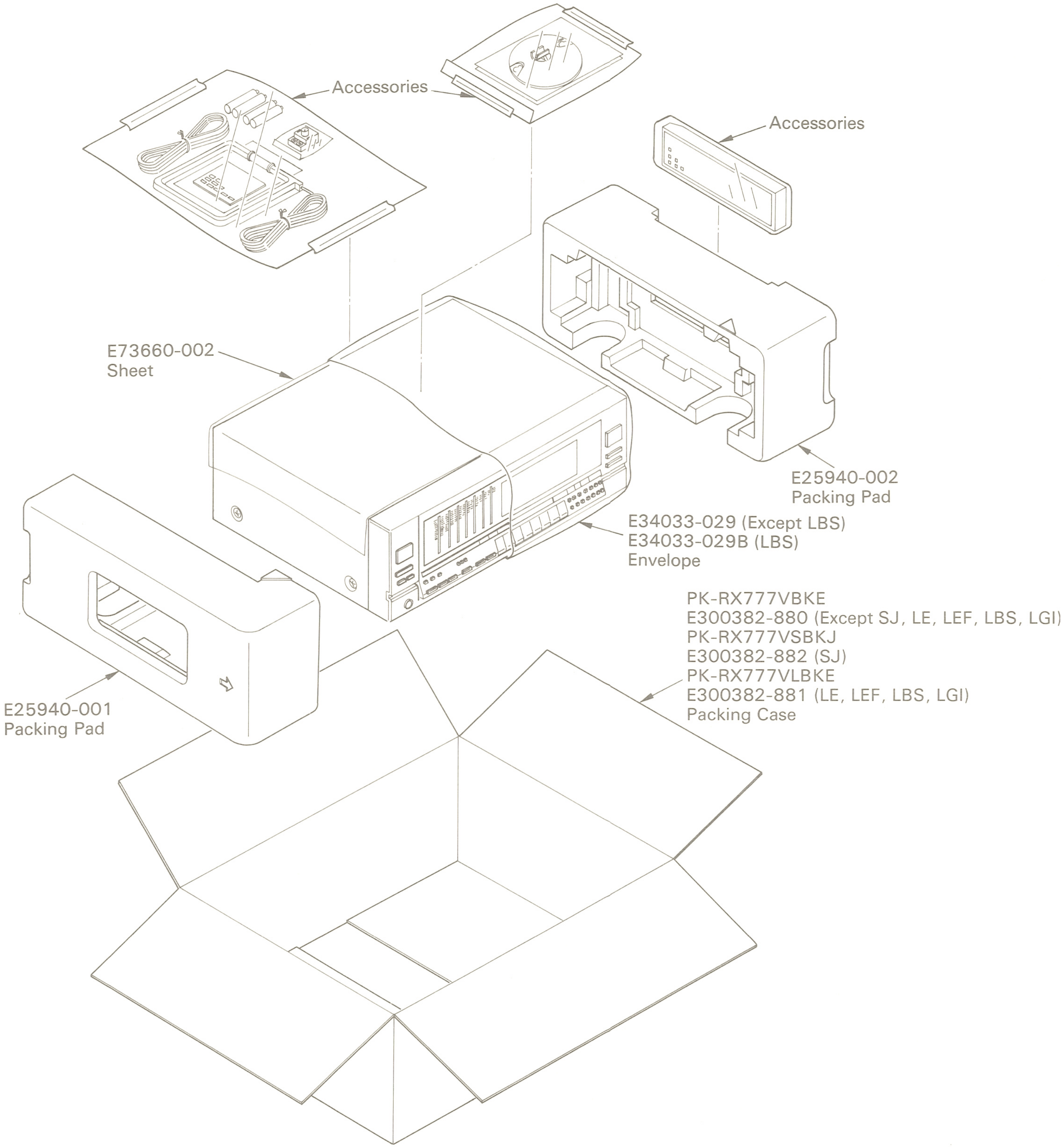
⚠: Safety Parts

The Marks for Designated Areas

J , SJ··········The U.S.A.
C················Canada
E , EF··········Continental Europe
A················Australia
G················West Germany
P , PG··········U.S. Military Market

LE , LEF··········Continental Europe (with LW)
LBS················U.K. (with LW)
LGI················Italy (with LW)
U···················Other Countries
No mark Indicates all areas.

Packing Materials and Parts Numbers


Accessories
Accessories
E73660-002
Sheet
E25940-002
Packing Pad
E34033-029 (Except LBS)
E34033-029B (LBS)
Envelope
PK-RX777VBKE
E300382-880 (Except SJ, LE, LEF, LBS, LGI)
PK-RX777VSBKJ
E300382-882 (SJ)
PK-RX777VLBKE
E300382-881 (LE, LEF, LBS, LGI)
Packing Case
E25940-001
Packing Pad

The Marks for Designated Areas			
J, SJ	The U.S.A.	LE, LEF	Continental Europe (with LW)
C	Canada	LBS	U.K. (with LW)
E, EF	Continental Europe	LGI	Italy (with LW)
A	Australia	U	Other Countries
G	West Germany	No mark Indicates all areas.	
P, PG	U.S. Military Market		